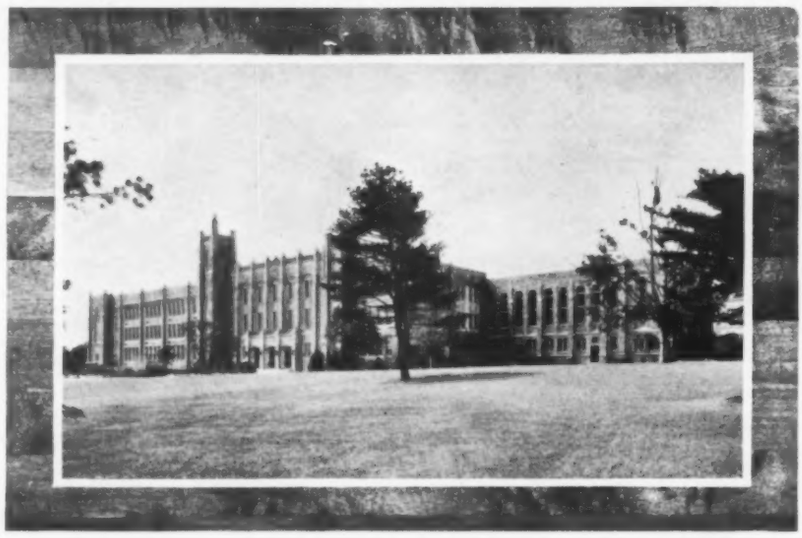
THE NATION'S SCHOOLS

DECEMBER · 1935



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White Plains, N. Y.

Starrett and Van Vleck
Architects
267 Fifth Ave.
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MAPLE *for Class Rooms—Study Halls—Sewing Rooms—Art Rooms—Science Rooms—Shops —Auditoriums and Gymnasiums*

Few problems in school construction require deeper consideration than that of selecting the material for floors. How will the flooring affect school room routine—the health and efficiency of pupils? Will it be an economy over a period of years? How easily can it be kept clean? Will it provide firm anchorage for desks? Will it simplify or hinder other construction work? These are some of the questions that must be asked—and answered.

Fortunately, one flooring material gives the proper answer to all these questions, *Northern Hard Maple*—the flooring material that combines warm, dry, cushioning effect beneath the feet, with lasting wear and smoothness.

Northern Hard Maple is resilient, tough-fibred, tight-grained. It will not sliver, splinter or develop ridges when subjected to the scuffing and pounding of youthful feet. It actually outwears stone! Maple, moreover, is exceptionally easy to keep clean. Its smooth surface offers no lodging spaces for dirt and dust.

Consider these advantages of Northern Hard Maple. Consider, too, the fact that it provides firm anchorage for desks and does not interfere with other construction work. Get all the facts about this unique flooring material. Consult your architect.

"In selecting the flooring material for class rooms, study halls, sewing rooms, art rooms, science rooms, shops, auditoriums and gymnasiums of the White Plains High School, we decided on the highest grade of Hard Maple obtainable.

From our experience over years, we have found that Hard Maple has proven more durable than other wood floors, denser, and if properly cared for, is easy to maintain.

If properly cared for, Hard Maple should continue to give satisfactory service for many years. For these reasons, we regard Hard Maple Flooring as an excellent material to use."

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Architects
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Bruce, E. L. Company (Mill at Reed City, Mich.)	Memphis, Tenn.
Cobbs & Mitchell, Inc.	Cadillac, Mich.
Connor Lumber & Land Company (Sales Office, Marshfield, Wis.)	Laona, Wis.
Cummer-Diggins Company	Cadillac, Mich.
Farrin Lumber Co., M. B.	Cincinnati, Ohio
Holt Hardwood Company	Oconto, Wis.
Kerry & Hanson Flooring Co.	Grayling, Mich.
Kneeland-Bigelow Company	Bay City, Mich.
North Branch Flooring Co.	Chicago, Ill.
Northwestern Cooperage & Lumber Co.	Gladstone, Mich.
Oval Wood Dish Corp.	Tupper Lake, N. Y.
Robbins Flooring Company	Rhinelander, Wis.
Sawyer Goodman Company	Marinette, Wis.
Stephenson Company, I.	Wells, Mich.
West Virginia Pulp & Paper Co.	Cass, W. Va.
Wells, J. W. Lumber Co.	Menominee, Mich.
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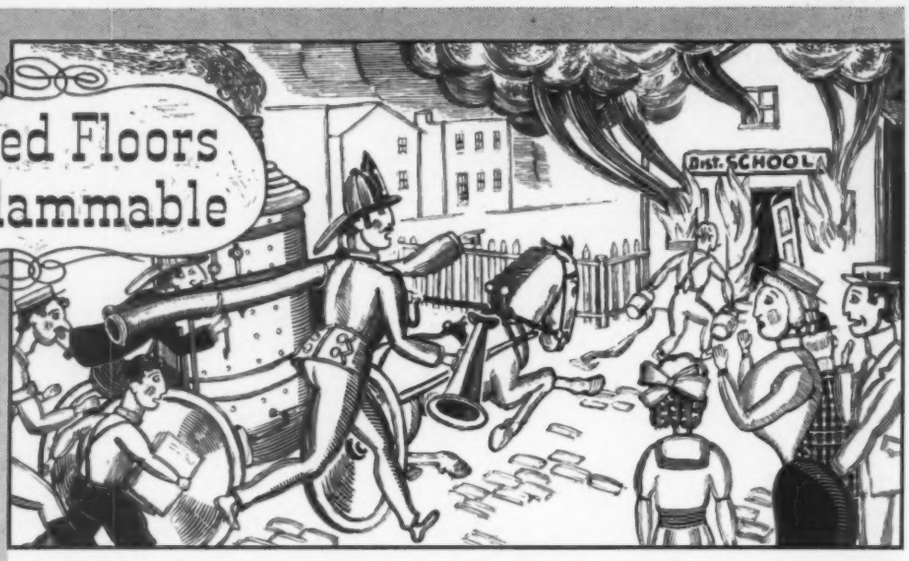

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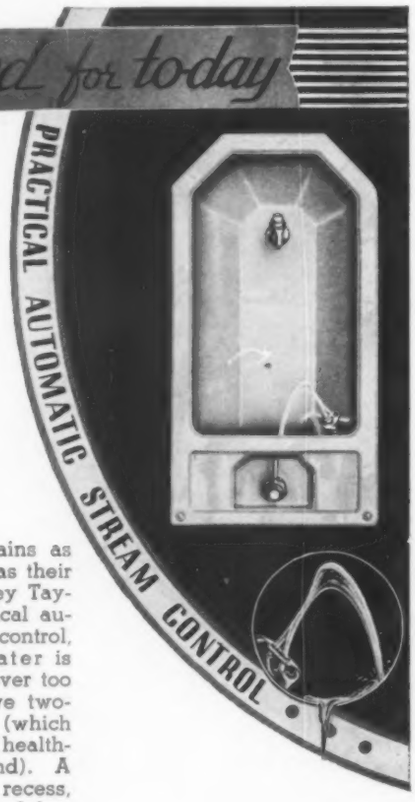

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subjects receive the remaining time.

These broad divisions have been arrived at through a study of 1934-1935 practices in sixty-three representative school systems. The study, made by Dr. George C. Kyte, professor of education, and Robert H. Lewis, a graduate student, both of the University of California, will be summarized in the next number.

A READY-MADE guidance plan cannot be clapped down upon a school situation. It is better to work with a few interested teachers than to try to force a program of personnel work upon an entire staff, some of whom are indifferent or hostile to it. The influence of several classrooms will in time permeate the school.

This is the type of reasonableness displayed in an article coming in January by Ruth Strang, assistant professor of education at Teachers College, Columbia. Miss Strang will outline steps in initiating a program of guidance, showing the reciprocal relationships between specialist and teachers.

MANY school gymnasiums are prepared to assume, upon demand, the rôle of auditorium. Often they are better gymnasiums than auditoriums because of poor acoustics. Long reverberation periods must be eliminated if these huge rooms are to be satisfactorily used for commencement exercises or other occasions.

"Let There Be Less Noise!" is the title of an article scheduled for early 1936. In it Carl J. Eckhardt, Jr., a professor of mechanical engineering, describes the acoustical plan carried out at the University of Texas gymnasium, which has so improved auditory conditions that as many as 10,000 persons may make up an audience there. Smaller groups also find the gym entirely suitable for entertainment purposes.

"BUY Christmas Seals" is an imperative scarcely needed by schoolmen. Their response is always ready, for they know how largely the antituberculosis campaign is directed toward those of school age.

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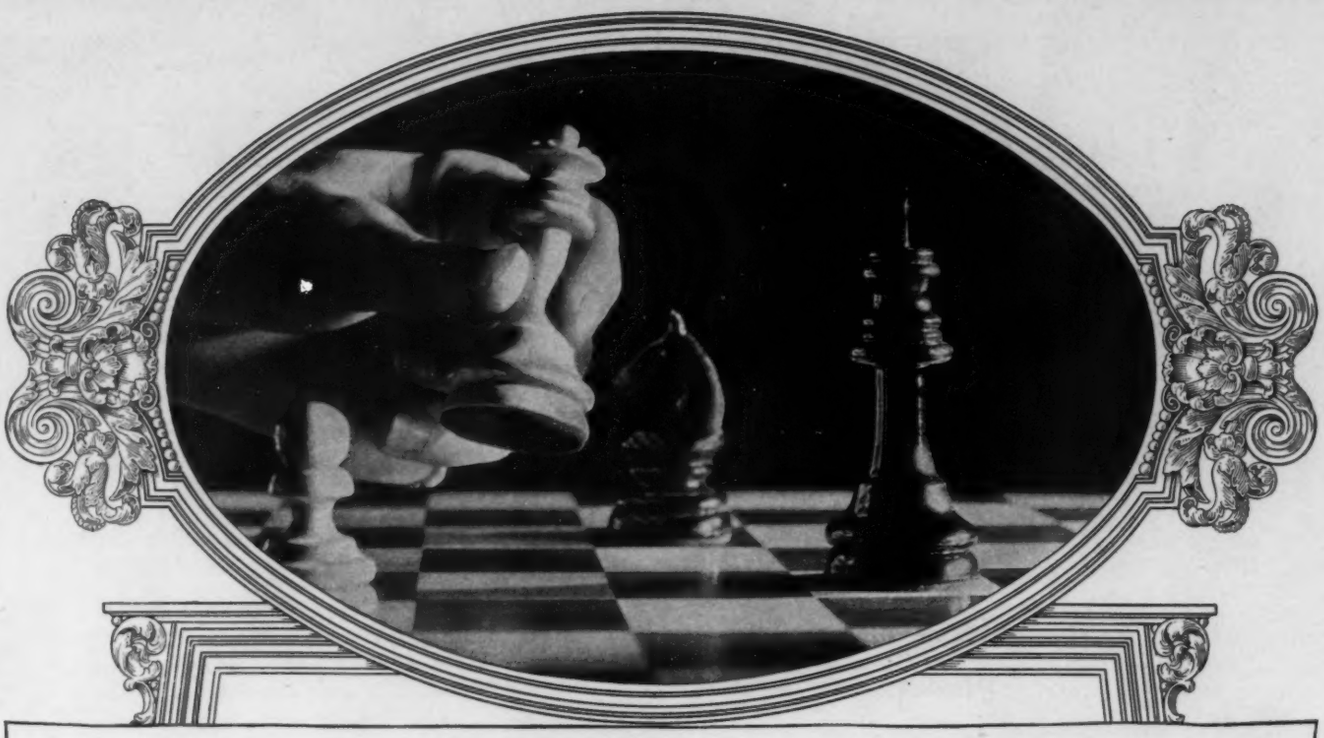

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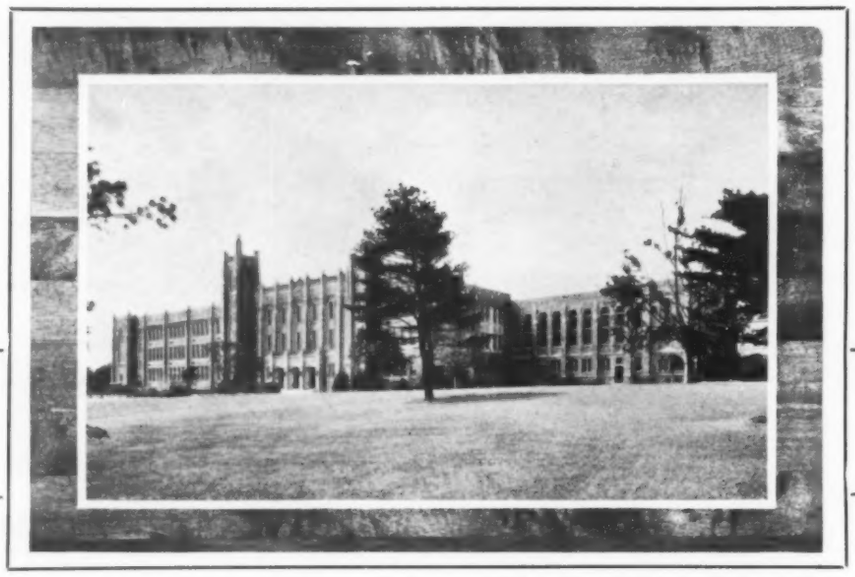

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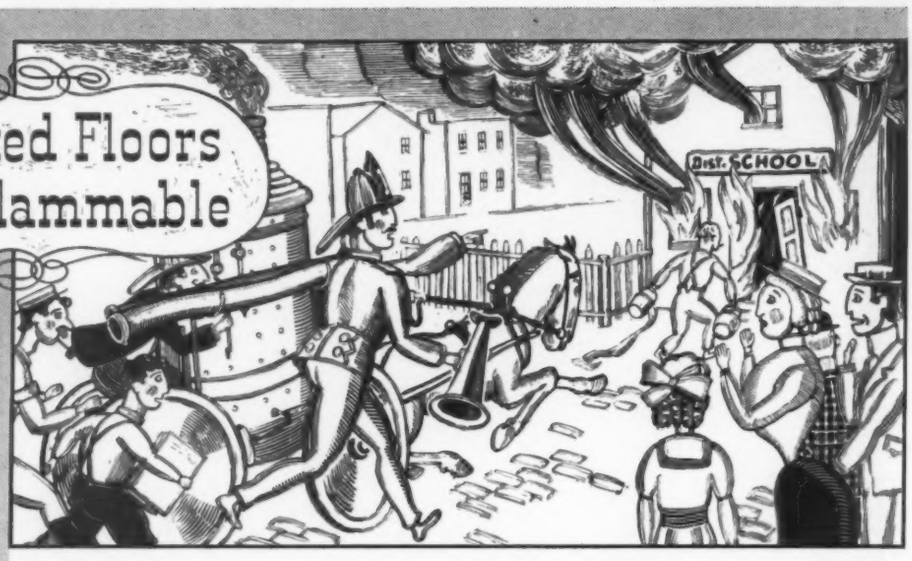

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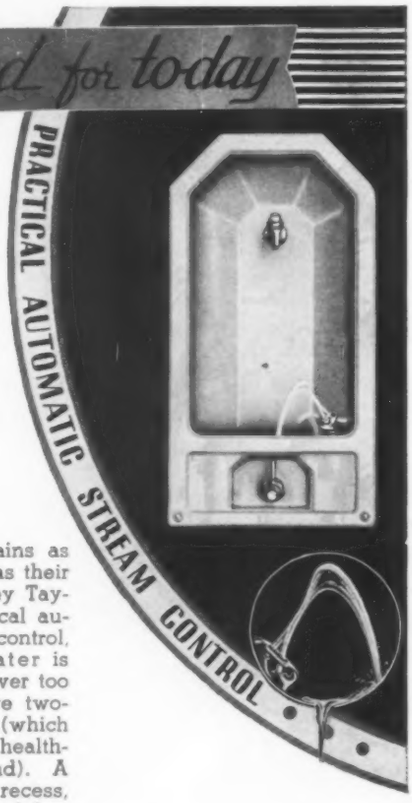

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How this vocabulary was compiled from the pupils themselves and how it compares with the Horn-Packer, Gates and Thorndike lists are to be told in the next issue by Garnette Watters, supervisor of language in the Hamtramck schools.

ABOUT half of the time in elementary school is given to the study of the Three R's. Science and the social sciences get about one-sixth of the child's time and special

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subjects receive the remaining time.

These broad divisions have been arrived at through a study of 1934-1935 practices in sixty-three representative school systems. The study, made by Dr. George C. Kyte, professor of education, and Robert H. Lewis, a graduate student, both of the University of California, will be summarized in the next number.

A READY-MADE guidance plan cannot be clapped down upon a school situation. It is better to work with a few interested teachers than to try to force a program of personnel work upon an entire staff, some of whom are indifferent or hostile to it. The influence of several classrooms will in time permeate the school.

This is the type of reasonableness displayed in an article coming in January by Ruth Strang, assistant professor of education at Teachers College, Columbia. Miss Strang will outline steps in initiating a program of guidance, showing the reciprocal relationships between specialist and teachers.

MANY school gymnasiums are prepared to assume, upon demand, the rôle of auditorium. Often they are better gymnasiums than auditoriums because of poor acoustics. Long reverberation periods must be eliminated if these huge rooms are to be satisfactorily used for commencement exercises or other occasions.

"Let There Be Less Noise!" is the title of an article scheduled for early 1936. In it Carl J. Eckhardt, Jr., a professor of mechanical engineering, describes the acoustical plan carried out at the University of Texas gymnasium, which has so improved auditory conditions that as many as 10,000 persons may make up an audience there. Smaller groups also find the gym entirely suitable for entertainment purposes.

"BUY Christmas Seals" is an imperative scarcely needed by schoolmen. Their response is always ready, for they know how largely the antituberculosis campaign is directed toward those of school age.

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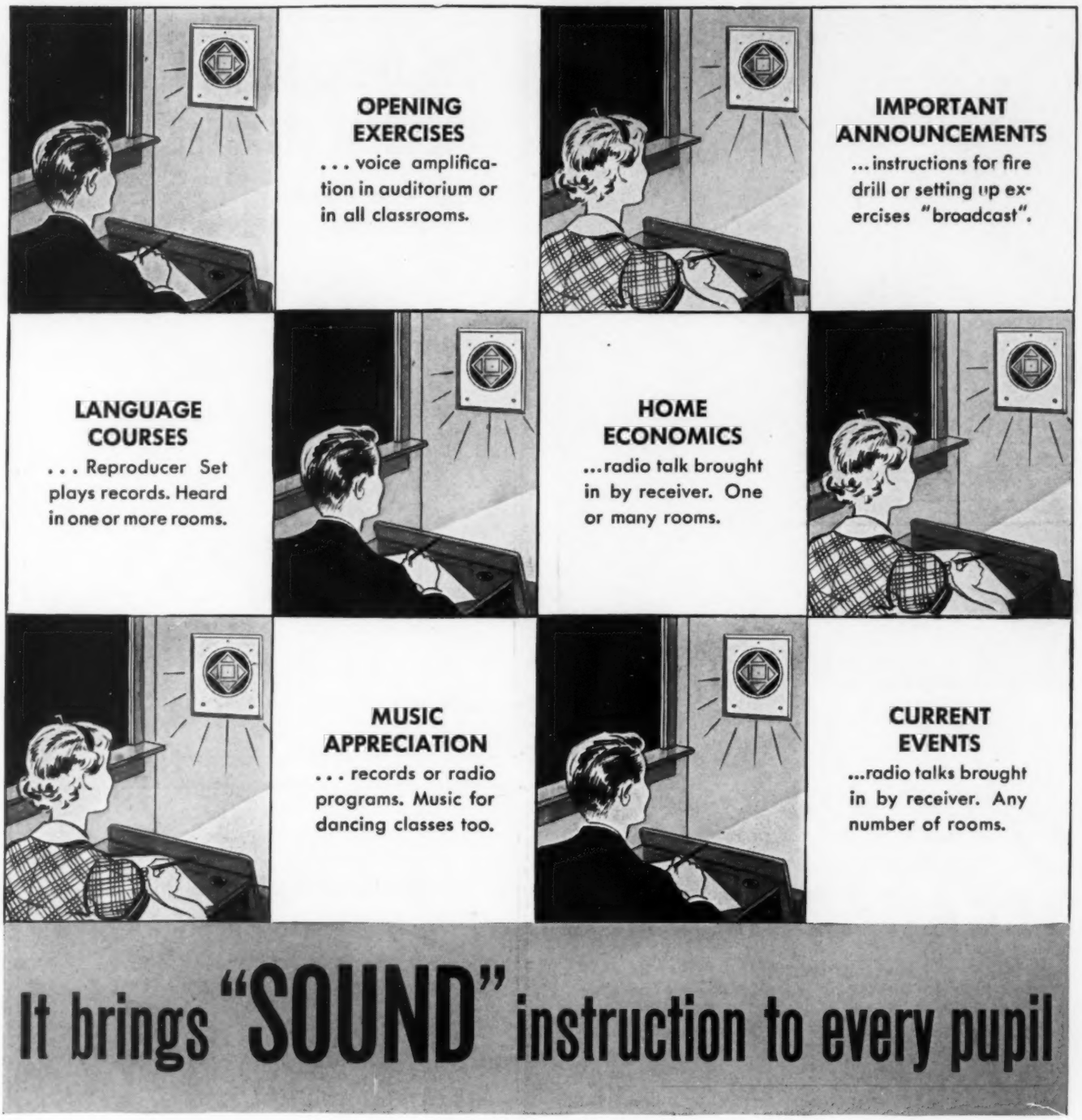

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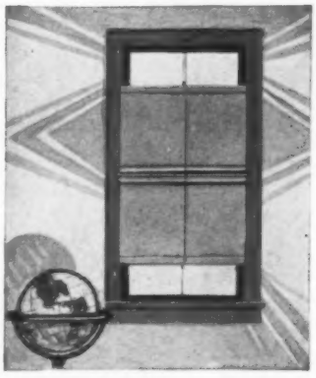

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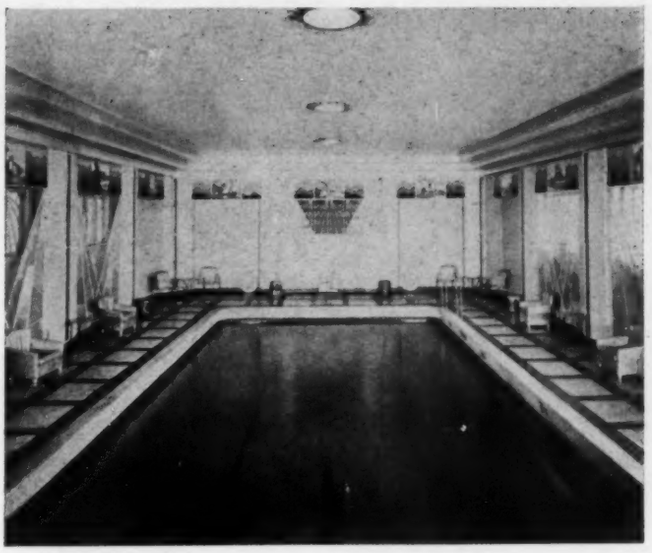

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VOLUME 16 DECEMBER, 1935 NUMBER 6

Looking Forward . . .

The Year in Review . . . Foolish Figures . . . Dangers of Centralized Education . . . Fingerprinting Acceptance . . . Subsidies for State Histories of Education . . . A Brave Stand for Academic Freedom

NINETEEN THIRTY-FIVE saw a continuation of the general improvement in the technical position of public education already quite noticeable during 1934. The emergency in education was considered over and the Joint Commission on the Emergency in Education requested its dissolution. Legislative enactments liberalizing state support or providing for deficiencies caused by failure of the general property tax did not have their full effect during the calendar year. In general, expenditures for current expense are tending to approach 1930-1931 levels.

The 1935 legislatures were generally more constructively minded than those of 1933. The effect of an aroused public opinion with respect to needs of public education was generally apparent. Much legislation of real significance was enacted.

Much attention was given to personnel problems. Teachers' salaries were increased in all except marginal and submarginal areas. Although the current expenditures approached 1930-1931 budget totals, the natural extension of service during the intervening four years required a considerable part of this general increase. Teacher salaries are still, with few exceptions, considerably below 1929-1930 limits. Attention was given to training and certification requirements with a general tendency toward improvement. Teachers' contracts received consideration and the California permanent tenure law was amended to provide for continuing rather than permanent tenure. The tendency to require stars hysteria, however, was unfortunate.

There was a slight tendency toward reorganization by consolidation of small districts. Utah and New Mexico moved forward in state organization while Rhode Island in the estimation of many slipped back a few steps.

The bright spots were in the extension of state financial aid to public schools in Ohio, Michigan, Oklahoma, Minnesota, Indiana, North Dakota, Montana, Utah and Nevada. These increased state subventions represented replacement of depreciations and contractions in local income. The total effect will help to restore general current purchasing power of the schools as of 1930.

Another bright spot is that the states have taken up the problem of educational reconstruction as their own and have not, with few exceptions, waited for the federal government to do something. This fact is encouraging to the maintenance of local control of public education.

The weakest spot is in the field of capital improvement and enlargement. Regular annual expenditures in this area should reach at least one half a billion dollars. Local school districts are so bogged down by debt that the usual method of financing plant by long term borrowings is no longer easily available. The greatest dependence was therefore placed on PWA grants and loans. It is estimated that $250,000,000 was allocated by the federal government to all types of schools during the calendar year. Upon the basis of this total the final expenditures for the academic year may reach $300,000,000. However, institutions of higher learning are included, which still leaves the public school total a long distance below normal. It is in this area that the greatest improvement may be expected during 1936, if certain current proposals are eventually carried out by the federal government.

Costs of Failure

Some years ago a child accounting specialist on an afternoon holiday began playing with failure percentages and per capita time-costs. By combining these he found that failures translated into dollars and cents of expenditure amounted to a large sum. He presented these data at a national meeting of attendance officials. Apparently the intoxication produced by standing before a patient audience, or else a congenital inability to stop when the piece had been spoken, led him to the startling generalization that these costs of failure were true costs and could be eliminated only be developing a technique for reducing failure.

The data themselves were interesting but the conclusions, like so many hasty and inadequate generalizations in education, were rather completely wrong. There was no indication of the fundamental relationship between individual capacity and program, without which these data had no meaning. It was just another high spot assumption, wrongly labeled as research.

However, it was good copy, made the front page, and everyone went home and tried the same experiment with local data. Our extravert surveyors of those years picked it up immediately; soon even the luncheon clubs and chambers of commerce were talking about the terrible cost of failure. Certain educationists in institutions of higher learning who knew nothing about economics or costs, and so were better prepared to speak on the subject, threw themselves into the fray with emotional ardor. Soon afterward, in terms of time, the problem landed on the doorsteps of superintendents of schools. They were asked questions by boards of education, by prominent if not always intelligent business men and bankers and by the press. Of these inquirers the press was always the hardest for the administrator to answer.

Stalling for time, the superintendents usually emerged from special supervisory conferences with ideas. If the expense of failures could be cured by reducing failures, it seemed a pretty easy thing to do. Out of this pressure developed certain adjustments which simply meant from the teacher's standpoint that there should be fewer failures. To hear was to obey and teachers began to soften the work and reduce standards. Nothing of the sort was ever admitted, but failures have decreased and those terrible cost figures no longer stare one in the face, and neither do inquiring reporters ask nasty questions on this score about the taxpayers' money. Even today, however, superintendents are still impressed with the implications of these original foolish assumptions. Only a few weeks ago one of our larger school systems received instructions to cut the "cost of failure" by "reducing failure."

All of the foregoing raises a question or two that should be considered. If failure is an added cost in the true sense of the word, does the technical removal of the word "failure" and the substitution of the word "promoted," with the amount of information and power a constant in each case, change the true condition of affairs? Is not the waste still present in the system? Is there any magic in an administrative ukase? Or should these earlier assumptions have been translated somewhat differently? Would not a rational plea for greater individualization of instruction and greater flexibility of standards in terms of individual differences and individual capacities, making achievement in relation to capacity a major criterion, have been more to the point?

If these foolish figures, prepared as most educational cost data are by enthusiastic but incompetent amateurs, have a value it will lie in the field of instructional reorganization based on child needs and possibilities rather than on a false mechanical base. If they stimulate intelligent change, even their earlier misuse may be forgiven.

The Nazi Challenge

No one can read thoughtfully Dr. I. L. Kandel's recent monograph entitled "The Making of Nazis" (Bureau of Publications, Teachers College) without being impressed by the serious challenge that the educational philosophy and practice of the totalitarian state offer to our dem-

ocratic tradition. Professor Kandel discusses objectively the origin, the philosophy and the practice of current education in Germany and adds a brief final chapter upon the Nazi challenge to us. He shows how the real gains of the 1918 revolution have been completely swept away. He indicates the simple methodology employed to secure control of the teaching profession by the governing *élite*. The reading of these significant descriptive passages inevitably draws attention to the movement toward centralization in this country. Nowhere have there been presented so forcefully the potential dangers of the centralization of one of the major forces of social propaganda — public education.

The glamor of the alleged efficiency of the centralized control and support of education has already made a definite impression upon many of our educationists and some of our professional interest groups. Many others who feel themselves inadequate to cope with the democratic method of maintaining our popular control of public education seek central support as the lazy man's choice. The reading of this short monograph is urged on every superintendent, principal and teacher. It can also form the base for several significant programs for parent groups.

Fingerprinting Is Valuable

The value of fingerprinting as an essential identification check on cumulative child records has been revived recently, this time through the stimulus of the federal department of justice. If memory serves aright the first general suggestion in this field was made in the early twenties and for a time was enthusiastically discussed in certain areas. It was quickly dropped because the emotional set of the community with respect to the implications was negative. Fingerprinting was distinctly a mark of antisocial conduct and the identification badge of the transgressor.

More recently the use of fingerprinting and footprinting by hospitals as a means of identifying babies, the spread of amateur interest (fingerprinting sets for children), the advocacy of such identification in special family record books and the increasing interest of adults in developing civilian collections are beginning to create a different attitude.

It will, however, require many more years of intensive education before the people generally are willing to drop their older concepts of fingerprinting and permit their children to be so recorded. Unless there is complete community acceptance of the idea it is advisable for school principals and superintendents to be somewhat cautious in its application, despite its potential values. The problem of securing acceptance lies distinctly in the field of adult education.

Worthy Subsidy

The resumption by the United States Office of Education of the publication of state histories of education is to be heartily commended. Much of the credit for creating this change in policy is due the National Society of College Teachers of Education. The first product of this worthy subsidy of scholarly effort is the "History of Education in Washington," prepared by Frederick E. Bolton and Thomas W. Bibb.

Casual study of the publication indicates that it will form a real contribution to that fundamental and detailed series of state historical studies that will be the broad base for further development in the field of our general educational history. It follows the general pattern of organization developed by the National Society of Teachers of Education as standard to these researches.

There is a definite feeling on the part of many educationists that certain areas in current histories of education are not only vague but inexact because of the casual research available in the several states. From the publication standpoint the issuing of state histories of education does not fall into commercial categories. They distinctly require subsidy.

Principles and Courage

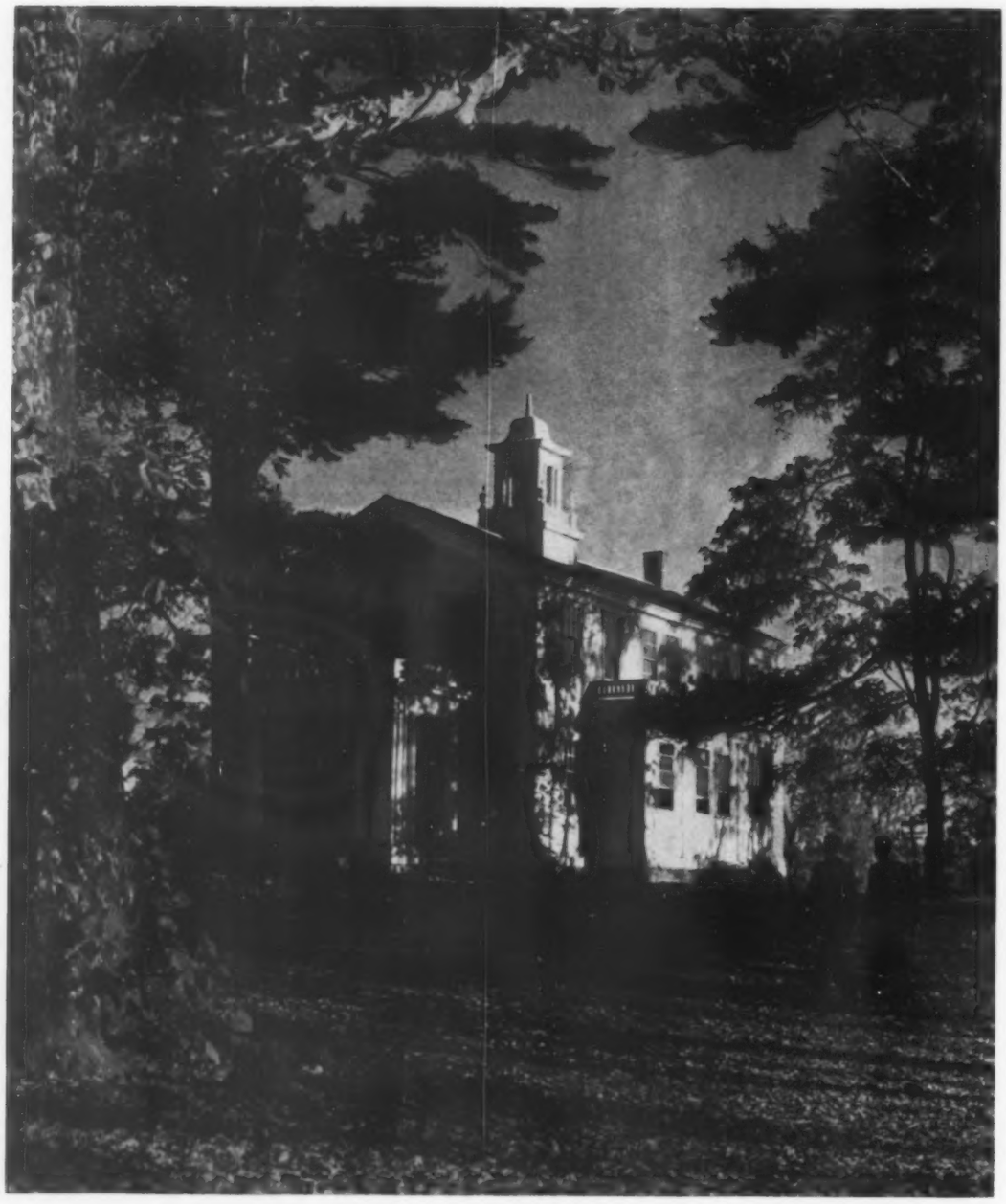
An unusual example of willingness to sacrifice personal security and welfare for a principle was the recent case of the University of Mexico. This educational institution, the oldest on the American continent, faced a fiscal crisis. President Cardenas offered the institution slightly more than $800,000 if the university council would agree to limit instruction in the social studies to the furthering of the governmental reform program. The university council, considering this condition an infringement on its four hundred years' right of freedom of instruction, refused the gift and resigned. There can be only applause for these sturdy academic gentlemen who placed a principle above their personal safety and comfort. One cannot help wondering how many faculties of institutions of higher learning in this country would be willing to make as brave a stand against finance for freedom of teaching.

The Editor

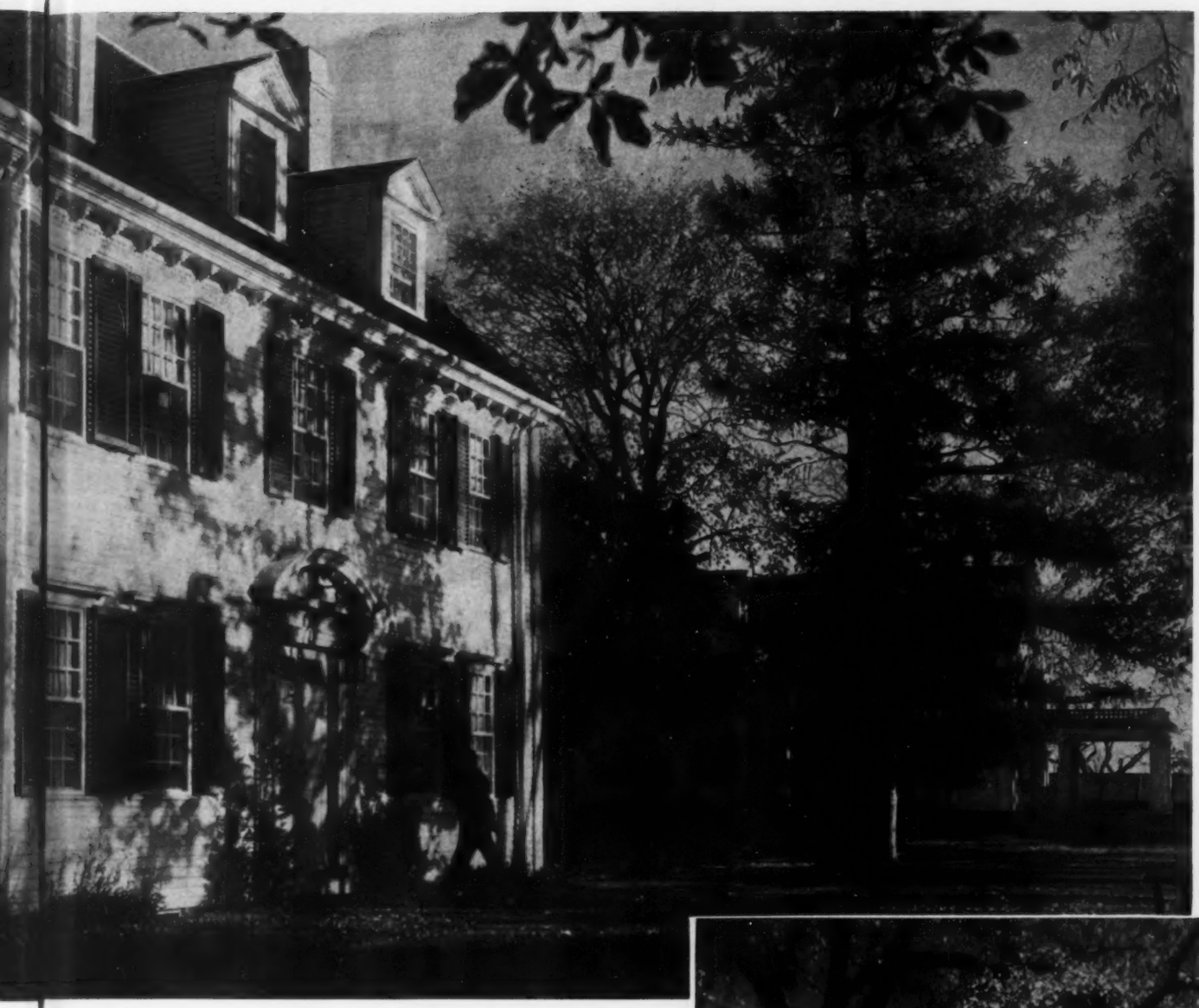
The Oldest Boarding School in America

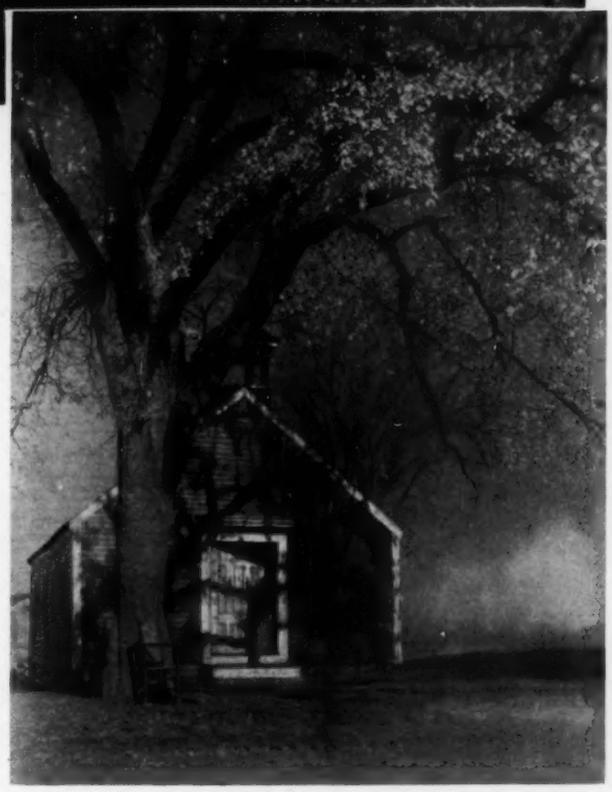
By EDGAR D. DUNNING

THE pioneering spirit was still powerful in New England in 1761, the year in which occurred the death of Lieutenant-Governor William Dummer of the Massachusetts Bay Colony. His life had already given ample evidence of his courage and vision, and at his death he left his Byfield estate in trust to found a boys' boarding school, first in America, now known as Governor Dummer Academy.



Parsons Schoolhouse, at the left, is shaded by ancient trees. The Mansion House, above, built about 1716, is now the head master's home. At the right on the opposite page, is the little red schoolhouse where Master Moody heard the first recitation in a boarding school in the United States.





The early history of the school is intimately connected with that of the colony and of the commonwealth. Paul Revere made its seal; Edward Preble, an early graduate, was one of this country's first and most noted naval heroes; Tobias Lear, later secretary to George Washington, was sent to the new academy to prevent his going to sea in the *Ranger,* which his father had just built for John Paul Jones.

The selection of the first master was probably the most important task facing the executors of the governor's will, and they were extremely fortunate in their choice. Samuel Moody had already achieved considerable reputation as a teacher in the school at York, Me., which he had guided for sixteen years. His grandfather, "Faithful" Moody, had long ruled the parish at York and was known throughout all New England for his faith and piety. His father, "Handkerchief" Moody, had added to the family tradition something of

color and eccentricity. Master Moody perpetuated both the piety and the eccentricity in his unique but effective teaching methods. Preparation for college in that day consisted of a thorough mastery of Latin and a few other subjects. Master Moody was a stern taskmaster who allowed no shirking, but in fair weather at the high tide he daily interrupted whatever class was in session to lead his pupils to bathe in the neighboring Parker River.

Two circumstances combined to give Master Moody a unique opportunity at the Byfield school. The first and probably the more helpful was the prestige which three generations of able men had lent to the Dummer name. Richard Dummer, the governor's grandfather, had come to Newbury with the first settlers and had been an important man in the colony. He had been the proprietor of an immense grant of land of which the 330 acres of his grandson's estate had been only a fraction. Jeremiah Dummer, his son and the governor's father, is still remembered as one of the outstanding silversmiths and craftsmen of the colonial period.

William Dummer himself had had an eminently successful career as lieutenant-governor of the Massachusetts Bay Colony, and during his fourteen years of office was acting governor for nearly seven years. His wife, Catherine Dudley, whose portrait still graces the walls of the Mansion House to which he brought her as a bride, was a woman of great personality and charm. She brought to the Dummer name the prestige of an alliance with the family of aristocratic Governor Joseph Dudley.

Much of Governor Dummer's scholastic success is due to the unusual amount of attention that is devoted to the boys' individual needs. This is a typical scene.

Another auspicious circumstance was that the location of the new academy in Essex County near Newbury, Ipswich and Salem made it a convenient school for the sons of the leading families of those important colonial towns. The names of Adams, Choate, Cabot, Derby, Frothingham, Hale, Longfellow, Moody, Osgood, Parsons, Pearson, Peabody, Phillips, Pickman, Prescott, Sargent, Seaver, Thorndike and Wentworth appear often in the list of Master Moody's pupils. The close relationship between the academy and the county which thus developed in the early years is reflected today in the large numbers of Essex County people who annually attend the commencement ceremonies, particularly the annual alumni dinner.

Master Samuel Moody opened the academy on March 1, 1763, in the little red schoolhouse which still stands on the campus. For fifteen years it was the only school of its kind, and during those years Master Moody's genius gave it an impetus which has never been lost. Of the more than 500 boys who came under his guidance in the twenty-seven years of his head mastership, a surprising number achieved distinction. The two signers of the Constitution from Massachusetts had been students of Master Moody. More than twenty of his pupils were members of the Continental Congress; five of them were United States senators; thirteen of them were members of Congress. Besides Theophilus Parsons and Samuel Sewall, chief justices of the Massachusetts supreme court, eleven other pupils of Master Moody were members of the Massachusetts courts. Two of Master Moody's pupils deserve especial mention for their work in the field of education. They are Samuel Phillips and Eliphalet Pearson, founder and first master, respectively, of Phillips Academy at Andover.

Governor Dummer Academy today is just as interesting and exciting as it was in Master Moody's day. A visitor at the academy receives the impression that important things are being done. The indescribable feeling of being in contact with something vital is partially explained when one learns that this ancient school, during a period of depression, has been growing in numbers, in influence and in the regard of educators throughout the country.

While many schools have been forced to operate with partially filled dormitories and decreased staffs, the Governor Dummer Academy's problem

has been to find accommodations for the increasing number of pupils seeking admission. The healthy growth which marked the twenty-three years of Dr. Charles S. Ingham's able and devoted leadership has continued under Mr. Edward W. Eames, the present head master; and although a considerable enlargement of the plant was one of Doctor Ingham's many contributions to the success of the school, it has recently been necessary to rent four neighboring houses for use as dormitories.

An increase of from seventy boys in 1930 to 120 boys in 1934 is an evidence of confidence in the school, which is a source of pride. Increases in the faculty have more than kept pace with the increase in pupils, and today the academy takes justifiable pride in having a master for each eight boys. The high ratio of masters to pupils has made it possible to treat the problems of each pupil individually. Small classes and a number of sections in each course permit each boy to proceed at his best pace in each subject. It is not necessary, for instance, for a pupil to repeat his mathematics because he does not happen to be qualified for promotion in modern languages. Nor is it necessary for one pupil to accommodate his pace to that of others noticeably deficient in a particular subject. The homelike atmosphere of the dormitories is also at least partially due to the fact that each group of eight or ten boys is under the immediate supervision of a master.

One is so impressed with the vitality of this school that he instinctively seeks an explanation for it. However, he finds new examples of it rather than reasons. He finds them in the boys' activities, which are enthusiastically pursued and which tend to increase to the point where the fac-

Most of the English classes meet informally around this table in the school's main library.

Governor Dummer boys have always been willing to help themselves. Here they are improving the academy baseball field.

ulty finds it necessary to limit them, lest the boys undertake so many activities that they cannot pursue any one of them thoroughly. The glee club, started four years ago, won in its first year a second place in a New York competition. Last year more than eighty boys tried out for it. The fencing team, now three years old, was selected last year from thirty candidates. The sketching class each year leads twenty-five or thirty boys to a new interest and appreciation. So many boys try out for the major sports each season that it is usually necessary to have a second team and a junior team to enable all of them to engage in competition. Here again the unusually high ratio of masters to boys provides coaching in smaller groups.

One is impressed also with the informal and intimate nature of the relations between the head master Mr. Eames, the faculty and the boys. This is seen particularly in the historic Mansion House, once the summer residence of Lieutenant-Governor William Dummer and now the residence of the head master and his family. The spacious living rooms are often crowded with boys, sometimes waiting to see the head master officially, but far more often dropping in for a chat about some activity that interests them. The boys can always count on the head master's interest in their activities, in most of which he participates actively.

Studies as well as sports are a mutual endeavor at Governor Dummer Academy. Examples of the sincerity of the boys' work and of the masters' deep interest in their success occur continuously. The practice of allowing the boys to study in their rooms instead of requiring their attendance at a single large study hall would be impossible where the boys were less sincere or the masters less interested. The practice requires the presence of each master in his corridor nightly, but it allows almost unlimited individual help when it is needed.

The scholastic results obtained fully justify the extra effort expended. Of the 198 members of the last five graduating classes, 169 have entered college. Forty-three colleges have Governor Dummer boys enrolled as undergraduate students at the present time. Naturally Harvard, Yale, Dartmouth, Amherst, Bowdoin, Williams, Massachusetts Institute of Technology and other New England colleges attract the great majority of graduates, but they may also be found as far away as the University of Southern California.

College Entrance Exam Record Good

In the results attained on college entrance board examinations may be seen another measure of Governor Dummer's success. Since the school enjoys the certificate privilege at all colleges and universities which grant that privilege to any preparatory school, the number of pupils taking the college entrance board examinations is relatively small. However, in the last five years Governor Dummer pupils have taken 125 such examinations and only three boys who sought admission to college by the college entrance board method have been rejected.

All of these things are an expression of the spirit and vitality that have determined the long and fruitful past of Governor Dummer Academy. An old institution, which has kept pace with the present day trends and has flourished through these uncertain days, now bends eagerly to the task of the future.

Behind Bad Grades and Behavior

By LEO KANNER, M.D.

THERE was a time when unsatisfactory behavior in the classroom was almost invariably laid at the door of abstract terms, such as "meanness," "badness" and "naughtiness." Poor scholastic achievements were explained on the basis of laziness or lack of interest. Moral issues were made of these shortcomings, and the child was regarded as a culprit who should be punished for his failure to conform to set standards of conduct and progress.

Recent advances of psychology and psychiatry have taught us to understand and help the problem child, instead of criticizing and berating him. The eighteenth and nineteenth centuries have given to physicians much needed information about the organs of the human body, their functions and diseases. Anthropologists have learned a great deal about skeletal development and the customs and manners of the various races and tribes. Jurists have made valuable additions to the treasury of legal knowledge. Educators have worked out and modernized suitable curriculums and methods of teaching. The twentieth century has begun to impart to physicians, anthropologists, jurists and educators alike an interest in, and a growing knowledge of, the human being, the person, in his entirety. We have come to concern ourselves with the assets and difficulties of an individual as functions or performances of the total human organism.

A Johns Hopkins psychiatrist considers the school child's health, habits and happiness

If a child misbehaves or does not do his lessons properly, we must study him as a person and find the reasons for his maladjustment. Meanness and laziness are not reasons or explanations; they are someone else's evaluations of disorders which themselves call for explanation and treatment.

There are almost innumerable manifestations of children's personality difficulties. Their great variety is especially apparent to one who, like myself, has had misbehaving and scholastically unsuccessful children referred to him for consultation by parents, teachers, physicians, nurses, social workers, juvenile court judges and probation officers, hospitals, convalescent homes, camps, orphanages and custodial and correctional institutions. Every one knows what a wide range of disorders is covered by the designations of sickness and fever. Nobody would dispute the need of a thorough search for the causes of physical illness and for adequate methods of prevention and treatment. Yet few people realize that there is also a great multitude of behavior or personality disturbances and that each instance requires individual investigation and an individual remedial program.

Many of the complaints have to do with faulty adjustment to matters of daily routine. Mothers and pediatricians the world over struggle constantly with the thousands of children who will not eat their meals; countless families are driven to distraction because Johnny or Elsie refuses to take sufficient nourishment in spite of coaxing, punishing, bribing, telling stories, dangling toys and many other procedures. Putting children to bed often presents a trying ordeal which is met by persuasion, scolding, promises, threats, keeping the light on and lying down with the child. Regulation of bowel and bladder control may be delayed unduly. The acquisition of desirable table manners, self-dependence and skill in dressing and undressing, proper care of nasal and salivary secretion, and general attention to cleanliness and appearance may not be established at a time when the average child has attained some proficiency in these performances.

Another group of difficulties consists of improper discharge of important functions. Speech may be disturbed by inability to articulate (stammering) or by hesitations and repetition of initial sounds (stuttering). Sleep may be disrupted by terrifying nightmares, sleepwalking, grinding of the teeth, frequent waking at night and restless tossing and jerking. Food intake may suffer from continual gagging and vomiting. Hysterical tendencies may sometimes interfere temporarily with normal vision, hearing, swallowing and other highly significant functions.

Parents and teachers are often annoyed by ac-

tions of children which are usually termed "bad habits" or "nervous habits." Some children, in rare instances even in junior high school, are seen deriving pleasure from sucking their fingers placidly while they listen to their teachers. Others bite their finger nails to the quick.

Some of these acts are carried out slowly and deliberately; others, the so-called tics, suddenly, jerkily and involuntarily. One of these manipulations, because of its sexual implications, is condemned by the witnesses with especial fervor and indignation; yet masturbation, as all other disorders, is something that calls not for punishment in disgust but for judicious and understanding treatment.

Many children are handicapped in their relations to other people by the unusual strength of their reactions to situations evoking in them fear, anger and jealousy. Dogs and cats may fill them with terror.

Parents and Teachers Are Distressed

Many parents are distressed by their children's disobedience and by early manifestations of antisocial trends, such as lying, stealing, destructiveness and cruelty. They often find that whipping and preaching do not remove the difficulty. The children, in turn, soon gain a reputation of being bad, live up to their reputation, are punished again and again, and thus a dangerous vicious circle is created.

Teachers are frequently puzzled not only by single acts, such as some of the above mentioned behavior disorders (thumb sucking, nail biting, temper outbursts, lying and stealing), but also by disturbing general attitudes and trends determining the conduct of some of their maladjusted pupils. They are confronted on the one hand with the meek, timid, submissive child who hardly dares to speak above a whisper and, on the other hand, with the boisterous, aggressive, bullying youngster whose ambition it seems to be to turn the classroom into a circus, with himself as the clown and the rest of the group as an admiring audience. Attitudes of sullenness or even open hostility, of tense apprehensiveness, of a smart-aleck type of playfulness, of excessive sensitiveness and of incessant motor restlessness often baffle the teacher and severely test her skill as a supervisor, coordinator and mediator of a group of children.

These problems of behavior and conduct used to be considered as being of secondary importance to the teacher. Her primary concern centered around her duties as a dispenser of knowledge. Her way seemed to be paved for her smoothly by clear-cut and well circumscribed grade prescriptions. Yet there were enough pupils who did not measure up to the prescribed standards in their achievements. Such pupils received bad marks and were not promoted to the next higher grade. That seemed to settle the problem. The pupils were dismissed with a shrugging of the shoulder as dumb, lazy, absent-minded, or as children "who could have done better, had they only tried a little harder." Recent advances in the psychology of education have brought about a change in this rather sterile attitude and created a wholesome curiosity with regard to the reasons for the supposed dumbness, laziness, absent-mindedness and failure to try harder.

This curiosity is centered around the child's personality. The misbehaving or unsuccessful pupil is viewed as a maladjusted human being who, for reasons to be carefully investigated, has failed to respond to the demands that his environment has placed upon him. He is a poor physician, indeed, who would treat a malady without making himself familiar with its causes and efficient methods of its prevention and remedy. He is a poor child counselor who would deal with a youngster's personality difficulty without making proper attempts to understand the difficulty and taking constructive steps for its improvement.

There is nothing mysterious or insuperable about the task of studying a child's personality and its disorders. Curiosity, common sense and sympathy are the principal requirements. The teacher, as well as anyone else working with children, must realize at the start that no two human beings are alike in their make-up and in their potentialities. Any class of thirty pupils is constituted of just as many different individuals. It is therefore a mistake to treat a heterogeneous group as if it were a homogeneous mass made up of exactly the same human material.

Cannot Guess or Generalize

A teacher is perplexed by the poor work of one of her pupils. The child's failure to progress with the majority of the group may be caused by a variety of factors. His eyesight may be so poor that he cannot discern the words in his book or on the blackboard. Again, he may have excellent eyesight, yet he has not yet reached the intellectual level that would enable him to comprehend the things taught in his class. Again, with good intelligence, he may have a specific reading disability which, if not recognized and properly corrected, may for many years hold him back in the lower grades. Again, everything may be in good order as far as the child's physical and intellectual condition is concerned, yet unhappiness and upheavals at home may so preoccupy him that his attention and concentration at school are reduced.

If the home situation is satisfactory, fear of a harsh and unsympathetic teacher may hinder his full and whole-hearted application to his lessons. Daydreaming excursions from sad or drab realities to realms of colorful fancies, boredom of a grade repeater already familiar with the subject under consideration, hunger during the later class hours of children who habitually go to school without breakfast, may also cause or contribute to unsatisfactory work.

This example alone shows that no amount of guessing or generalizations can solve the difficulties of an individual pupil. We must know the nature of the problem with all its implications and complications, the time, manner and special circumstances of its onset, its course and the attitudes which the child himself, his parents, his classmates and his teachers have assumed toward the problem.

Three Cases for Analysis

How important this is, is best shown by the following examples.

A child, normally intelligent, very conscientious, keeps copying and recopying his homework dozens of times, is dissatisfied with the results and, with tears in his eyes, begs of his parents to let him stay up another half hour, so that he may do the work all over again. The first draft has been good. The teacher is satisfied. The parents are satisfied. They offer no complaints about the child's school achievements. Yet the child himself displays obsessive trends which require immediate and expert attention.

A mother once brought her seven-year-old daughter to the clinic with the request for a mental examination. She feared that there might be something wrong with the child's mind because in the first grade she had had nothing but E (Excellent) marks, while her second grade report contained a few G (Good) marks. The teachers were satisfied. The child felt that she had conscientiously done her duties. But the mother, trying to mold the child to suit the dictates of her perfectionistic husband, became alarmed about her daughter's supposed "mental deterioration".

A left-handed child enters school. His sensible parents have not interfered with his use of the left hand. The handedness question has not presented a problem to them or to the child. His teacher tries to "break him" from his left-handedness. The child becomes tense, uneasy and soon begins to stutter. Far from seeing any connections, the teacher becomes annoyed at the stuttering and tries to "correct" him before the class.

We see that in the first case the complaint comes from the child himself; the difficulty lies within him. In the second instance, the complaint comes from the mother; the difficulty lies in the parental perfectionism. In the third example, the complaint comes from the teacher; the difficulty lies in her unreasonable attitude toward left-handedness.

When we know the complaint with its contents and sources, we wish to be acquainted with the person about whom the complaint is made. A brief biographical survey will be of considerable help. It will give us an idea about the manner of early habit training, about illnesses and their effects, about the child's adjustment to the home and the neighborhood.

We are then ready for an analysis of the child's assets and liabilities. A thorough personality study includes careful attention to his physical, intellectual, emotional and environmental background. Good mental hygiene consists in the best possible adjustment of all that which such an examination has found to be in need of adjustment. In one case, the removal of infected tonsils or the prescription of glasses for nearsightedness may go far toward solving the problem. In another, placement of a retarded child in an ungraded or vocational class may relieve the situation. In still another, when domestic conditions have been found to be at fault, a change of parental attitudes must be accomplished; excessive sternness, unwarranted ambitions, overindulgence, overprotection, oversolicitude, or carelessness and indifference are at the bottom of many behavior disturbances of children. Every individual problem must be solved individually.

Teacher Can't Work Alone

The teacher cannot do all this alone. She will always need the cooperation of the child's parents. She will often depend on the school physician and the school nurse. And she will sometimes need the help of a psychologist or of a psychiatrist. Families, who may resent a teacher's intrusion into their private affairs, will gladly collaborate with a psychiatrist if they are made to understand that their collaboration will bring about a betterment of the child's condition.

A teacher's task is no longer restricted to the functions of imparting the three R's. This is her specific domain, it is true, and in this she is an undisputed expert. Yet in our era, in which the school is not only an institution of learning but also a highly valuable participant in the job of character building, the educator must share in the attention which all the child-care agencies of the community pay to the three H's, that is, the matters of Health, Habits and Happiness, of the children entrusted to their care.

Typewriting

Small Pupils Use Big Machines and the Touch System

THE fact that children in the elementary grades could be taught to typewrite has been accepted for years. Just what the result of the inclusion of the typewriter into the elementary schools would be was undetermined until the volume, "An Experimental Study of the Educational Influences of the Typewriter in the Elementary Classroom," was made public in May, 1932. This investigation was directed by Prof. Ben D. Wood of Teachers College, Columbia University, and Prof. Frank N. Freeman of the University of Chicago.

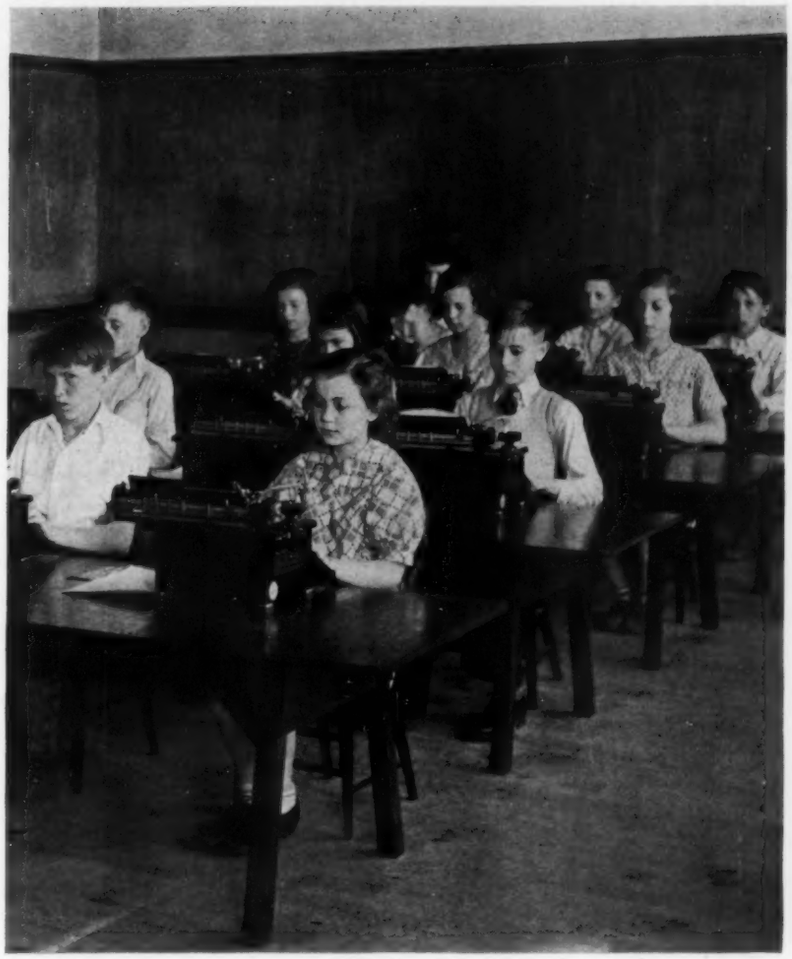
This study aroused great interest in the public schools of Woodstock, Ill., and the idea of putting the typewriter in the elementary schools was considered. It was decided to carry on an experiment before introducing typewriting to the school.

The experiment was to contain certain refinements of method, equipment, physical surroundings and objectives. Typing was to be taught in a formal class, not given to the children as a new toy. An experienced and qualified teacher was to be used in place of the regular classroom teacher who might or might not be qualified to teach typewriting. The touch system was to be taught rather than a haphazard lack of system. Standard machines were to be used rather than portables. A classroom was to be equipped and the children were to be brought to the typewriters rather than the typewriters being carried to the children.

Two preliminary experiments were conducted. One was the system whereby the child's fingers are equipped with colored rings on which are animal pictures which correspond to similar colors and pictures on the keys. This system was not continued very long. The second preliminary experiment was one in which an available textbook on children's typewriting was used, but this was also discarded as it was not adaptable to the touch system.

In February, 1935, permission was requested of the board of education to carry on a larger experiment with the cooperation of a local typewriter company. Permission was granted and an appropriation was made to cover the expense. Twenty-four typewriters, standard machines, twelve for each school, equipped with blank keys and primer type, were furnished by the company. A full-sized classroom in each of the two elementary schools was equipped completely. A qualified typewriting teacher who had had ample experience was employed. This teacher had taught in the elementary grades and had done considerable teaching of beginning reading.

Enters the Grade School



By W. J. COLAHAN

The selection of the experimental schools group was made by taking as far as was possible a cross section of each grade. Twenty-four pupils were selected from each grade, the pupils being enrolled in two elementary schools. Every child wanted to be included in the experiment and every parent seemed to want his children to be included.

Before the experiment was started, Prof. Frank N. Freeman of the University of Chicago was approached and his aid enlisted. Throughout the entire experiment he furnished wise counsel, and without his generous aid nothing would have been accomplished.

The results of this experiment proved that typewriting would be a valuable addition to the curriculum of the Woodstock public schools. As has been found in all other typewriting experiments, the typewriting instruction not only resulted in adequate achievement in typewriting but resulted in gain in achievement in all branches of learning. Other benefits are the added interest in school on the part of the pupils and the affirmative reaction of the parents. This reaction showed itself in the purchasing of typewriters for home use and the general demand by the parents that typewriting be taught to all children.

As a result of this experiment all pupils in Grades 1 through 5 in the Woodstock schools are being taught touch typewriting during the present school year. Five hundred children are spending a school period each day learning touch typewriting on standard machines. The instruction will be introduced into the sixth, seventh and eighth grades during the school year of 1936-1937.

Our experiment has proved satisfactorily that the teaching of typewriting is a valuable addition to the elementary school curriculum. The touch system should be taught, the children can use it, and to allow them to use any other system would be to build up faulty methods which, in later years, would have to be broken down before the touch system could be taught. Standard machines should be used because of their greater ease of operation for little folks with growing motor control. The standard machine is superior in ruggedness, which is important when a number of young people are learning to typewrite. The children greatly prefer to typewrite on the standard machine.

Little is known about materials to be used, table size, proper seating and best methods, but some advance has been made, and we expect to make considerably more progress this present school year with our entire elementary school population in typewriting classes.

Approaching the Public—New Style

By DAVID D. HENRY

THE foundation of the educational system is the belief of the people that the structure is vitally essential to their welfare. "High pressure" public relations activities may for a time erect the program beyond the understanding and real appreciation of the people for whom the structure is built. In the long run, however, the quality and extent of public education must harmonize with what the people believe to be its value.

The depression has disturbed the thinking of many people in regard to values of education. People have discovered that the high school diploma is not a magic password to a desirable job. They have observed that college graduates, too, are unemployed. Since most people have judged education in terms of materialistic success, it is natural that they should inquire as to the value of continuing the same support as formerly.

If essential public support and good will are to be recreated, our citizenry must be made to realize that there are important values of education that are not measured entirely in terms of dollars and cents returns to the individual.

Educational Interpretation of Future

Two new premises must be established as the bases for future educational interpretation:

1. Wholesome personality development and desirable character formation are more important to the common good than any direct relationship between formal schooling and vocational or professional reward. Education for enjoyment, education for inspiration, education for enlightenment, as well as education for informational ends, are essential to that integration of personality which makes for individual happiness and desirable socialization. These, in turn, may contribute to individual success, but they in themselves are important.

New attention must be given to avocational as well as to vocational education; curriculum adjustment in terms of the many rather than the few; community service; adult education, and, in general, differentiation of educational opportunity so that every one has a chance for "an abundant social and individual life in accordance with his capacity."

When it becomes obvious that schools are producing citizens interested in civic service, are preparing young people for the new leisure of a power age, are effectively teaching boys and girls about cooperative living, are sufficiently assisting young people to adapt themselves to changing social conditions, much of the current criticism of the school program will disappear. A blind defense of past practice will not remove those elements of the criticism that ring true. Sound social interpretation demands a frank examination of present curriculum practice in terms of the social problems of today.

2. Education is essential to a democracy, inasmuch as it contributes to the development of those qualities of character and those social attitudes that are basic to successful participation in democratic government. Public education, in contributing to an understanding of social trends and an appreciation of democracy, must be regarded as the one great defense against the attacks upon the general morale made by despair, poverty, confusion and doubt. Admitting many of the inadequacies of public education, we can still maintain that it is the one paramount stabilizing social force in meeting the enemies of democratic government. More than ever before do we need resistance against the appeal of the demagogue, and against the irrationalism of much that finds its way into print. Further, we need constructive help, in the form of emotional and intellectual stimulation, for the many thousands who are out of work and out of school, who have nothing to do but wait for a breakdown in character fiber.

New Attitudes and Methods Needed

The effective social interpretation program of the future will be based upon a new evaluation of the goals of education. Further, it must employ sound methods of approach. More than ever before is it important that the layman participate in school management. His sharing directly in the educational program through community activities of many kinds will win his confidence and active interest. This kind of continuous educational interpretaton is greatly needed. Sporadic emotional campaigns are superficial and temporary. The one hope for the support of the kind of educational program needed to meet the challenge of the present social age is an active, appreciative, informed public opinion generated in the local communities.

When a Teacher Goes Job Hunting

By BENJAMIN W. FRAZIER

WELL over 90,000 graduates of teacher-preparation curriculums, ranging from one to four years in length, are turned out annually by normal schools, teachers' colleges and arts and science colleges. The total number of unemployed teachers has been variously estimated at from 150,000 to 200,000.

Teachers prepared for specific types of work are often impelled, when long unemployed, to take positions quite different from those for which they prepared. Employing officers face a difficult task in selecting from among the numerous applicants with whom they are confronted, and often these officers are forced by circumstances to choose unwisely. With an eye to dwindling budgets, they are not always greatly concerned about the teaching specialties of applicants, nor even about the exact levels of preparation they have attained.

Effectiveness of Placement Work Varies

Among other causes for this situation, inadequate placement facilities and means for putting the right teacher in the right place play a prominent part. The agencies and methods by which new teachers are located are numerous and their effectiveness varies greatly. The most common methods are indicated by the National Survey of Secondary Education, which shows the percentages of new teachers employed for the year 1929-1930 who were located by various means in city and county school systems. The percentages of 6,079 new city elementary and secondary teachers located by different methods or agencies were:

Method Used in Locating Teachers	*Percentages*
Applications by individual teachers	56.9
Placement bureaus of higher institutions	15.9
Private teachers' agencies	13.1
City teacher-training schools	4.2
Visits of employers to other schools or systems	2.9
Visits to higher institutions to interview department heads	2.4
Visits to higher institutions to observe practice teachers	.9
State appointment bureaus	.8
State teachers' association bureaus	.8
Lists from higher institutions of candidates available	.7
Other agencies	1.4

The two methods that head the foregoing list were also the most common ones followed in locating 1,912 new teachers in county school systems. The county systems, however, relied more heavily than the city school systems upon visits to higher institutions to interview department heads (6.3 per cent and 2.4 per cent respectively); and upon lists from higher institutions of candidates available (4.2 per cent and .7 per cent respectively). The county systems relied less heavily than the city systems upon the private teachers' agencies (3.8 per cent and 13.1 per cent respectively).

It is clear from the foregoing list that employers rely more heavily by far upon applications by individual teachers than upon any other method of locating teachers. That this method, when not used in connection with other methods, is more or less a hit-and-miss procedure, involving much wasted time and effort, many disappointments and much unnecessary emotional stress and strain, will be attested to by almost every experienced teacher.

Employers who depend entirely upon uninvited applications as a source of supply for new teachers are likewise destined to receive many disappointments. Not infrequently, an applicant will write a dozen or a score of letters of application to school systems where no vacancies exist, or where none exists for which he is at all qualified. The members of no other profession are forced into such an unseemly scramble for employment, as are the teachers. Literally basketfuls of applications for a single position may be received by a selecting officer or his school board members. An entirely false impression of teacher supply is often thus engendered in the minds of board members, and the salary schedule adjusted accordingly, to the permanent injury of the schools.

Institutional Placement Offices Common

Institutional placement offices, next highest in rank on the foregoing list, are important sources of service to employers, to institutional graduates, and less frequently to institutional alumni of former years. According to the National Survey of the Education of Teachers, the percentage of placement of graduates registered in institutional placement offices ranged in 1931-1932 from about 35 per cent in nonsectarian colleges for women, to 87 per cent or more in state normal schools. Even in normal times, institutional placement offices

rarely attempt to place all their registrants, since a certain number of unpromising candidates are inevitably on hand. The more promising candidates usually receive first consideration. Depression conditions have severely limited even the demand for these. However, informal reports recently from a number of institutional placement offices in different parts of the country show a marked improvement in placements over preceding years.

The private teachers' agencies were used in locating the teachers reported by the National Survey of Secondary Education almost as often as the institutional placement offices (13.1 per cent and 15.9 per cent respectively). This occurred notwithstanding the fact that the private teachers' agencies charge a commission for placement. There were known to be more than 100 private teachers' agencies in 1932. Of these, fifty-six, located in twenty-two states, were listed in 1934 as members of the National Association of Teachers' Agencies. This organization endeavors to clarify, standardize and improve the placement activities of its members.

Other Agencies Rarely Employed

City training institutions, next on the list, have been decreasing in numbers for many years. Once fairly numerous, there remain today only nineteen city teachers' colleges and normal schools for white students, and three for Negro students. The placement services of this type of institution are therefore limited to a comparatively small number of cities. Most graduates of these institutions are residents of the cities in which the institutions are located and enter the city schools or are placed upon the city eligible list upon graduation or upon passing an examination. Since city schools have employed a greatly decreased number of new teachers in recent years, entrance to the institutions as a rule has usually been limited to superior students.

Visits of employing officers to other school systems or to practice schools of higher education institutions are often commended as promising means of selecting candidates. Such visits, while desirable, are expensive in time and money, and are likely to be too short for adequate observation of the applicants. The impressions received from such visits, however, when combined with the recommendations of public school or institutional officials immediately responsible for the applicants' work, give the prospective employers information of much value. Confidential opinions of employers, when such are impartially rendered, constitute one of the most valuable types of evidence concerning the applicant that can be secured.

State teacher placement bureaus, usually conducted by the state departments of education, are maintained by slightly less than half the states. These states include:

Alabama	Maryland	Pennsylvania
Connecticut	Massachusetts	South Carolina
Idaho	Minnesota	South Dakota
Indiana	Mississippi	Texas
Iowa	Montana	Vermont
Louisiana	Nevada	West Virginia
Maine	New Hampshire	Wyoming
	Oklahoma	

In a few of the foregoing states placement services are more or less informal, and in some states state department officials, not listed, may assist teachers to secure positions as a merely incidental service.

The state education associations that maintain more or less definitely organized placement services for teachers, according to the latest reports available, are located in seven states: California, Kansas, Michigan, Montana, Nebraska, North Carolina and Utah. As in the case of the state department of education teacher placement services, informal state education association services may be rendered in other states not indicated here.

Extensive lists of available candidates are infrequently sent out by institutional placement officers. For good reasons, these officials are hesitant to adopt this means for advancing the chances of their candidates for placement. Such lists quickly become out of date; the chances for placement of the wrong candidate in a given position are increased, and there are other reasons also why long lists of candidates are not often widely broadcast. Recommendation of specific candidates for known vacancies, made upon direct request of employers, is much preferred by the majority of institutional placement officers.

Little Coordination of Placement Services

No evaluation of the relative effectiveness of the foregoing agencies is here attempted. It is apparent, however, that few if any of them have been developed to anything like their maximum possibilities of usefulness. Not only is there no uniform system of teacher placement, but there is little coordination of the services of the several types of facilities for placement that exist. These conditions invite much waste of human resources, and often permanently handicap the individual teacher who is striving to establish himself permanently in his profession. Such a situation is worthy of more attention by the profession as a whole than it has so far received. The process of preparing a teacher is not complete until he is placed in the position for which he is prepared.

Straight and Crooked Thinking About *Integration*

By W. HARDIN HUGHES

BY THE time an educational movement is well under way, most of us have become affiliated with one or the other of two contending factions — the conservatives and the reformers. There seems to be no place for the moderate individual or even for the cautious thinker who can stand independently of parties and, with coolness and courage, point out to both sides how wrong, and yet how indispensable, they both are, if worth while progress is to be realized.

In the main, perhaps, the chief differences between conservative and reformer are those of temperament and attitude. The one sees only the good in the existing order and fears the dangers that would be incurred in scrapping it, while the other sees only the evil in the actual and fervently hopes for its improvement. What is needed, no doubt, is a combination of the two attitudes so that each of us may become a conservative-reformer, conscious of the excellencies of the old as well as of the many needs for its modification. Both extreme attitudes are to be avoided if we are to have a complete picture of the real problems confronting us.

Meaning of Integration

But what is the meaning of "integration"? In its original Latin form, *integer* meant, literally, untouched. Now a thing that is untouched is a complete entity, entire and indivisible. In a metaphorical sense, integration may be used in a great variety of ways. In mathematics, it has come to mean one thing; in hydrometry, another; in psychology, still another, and finally, in education, the term has come to mean almost anything according to the training, experience, attitude and purposes of those who use it. To the great majority, perhaps, "integration" is simply an abstract term which each person is inclined to translate into his own emotional, but nonintellectual, response. Like "democracy," "liberty," "equality," "fraternity" and other emotive terms so frequently used as slogans, banners and rallying cries, but which in concrete applications reveal little but their ambiguities, "integration" as generally used is almost meaningless. This, however, is no particular fault of those who hear such words but is due, in large measure, both to the unscientific nature of language, for which no individual is responsible, and to the generally inadequate training of our people in the use and interpretation of words.

Most of us have never really learned the important fact that language may be a hindrance as well as an aid to straight thinking, and that ambiguous terms, uncritically used, lead necessarily to intellectual confusion and misunderstanding. The metaphor, and much of our language is metaphorical in nature, is the chief offender in this connection. Figurative language has the weakness of carrying a narrow meaning into broader applications.

What the Essentials of Integration Are

Before too much battle is engaged in between the two factions, therefore, it would be well for each to define as clearly as possible just what the essentials of integration are. Whenever this has been calmly and conscientiously done, it has invariably been found that good teachers in both camps are about equally interested in the integration of the learner but unequally interested in the integration of curriculums. It seems that the real differences between thoughtful conservative and intelligent reformer in this matter are not differences pertaining, primarily, to desirable aims to be accomplished but differences related to curricular paraphernalia and methods of teaching. No one is so foolish as to contend that integrated learning is undesirable or that scholastic offerings should be unrelated to life. Only straw men set up by the integrationist could be represented as being so foolish.

By what means, then, are we to secure integrated learning? Are we to continue compartmentalized subjects or are we to throw down the artificial barriers and make it easily possible for pupils and teacher to follow their varied inter-

ests wherever they may lead? Or is there some other and better solution of the problem?

At the elementary school level, some promising experiments have been carried on. The reader is familiar, no doubt, with successful integration plans in the child-centered school. Units of work carried on by the so-called activity method seem, in many elementary schools, to have contributed effectively to integrated learning. Such successes have given impetus to the movement and the effects are already being felt in the higher schools both at the secondary and the college levels.

Possibility of False Analogy

But we need to be on our guard against false analogies in reasoning. Because a particular method has been found satisfactory at the lower school level is no certain proof of its feasibility at the higher levels. While it is granted, even by the conservative, that the child, in his earlier years, is interested in simple and closely related experiences easily within the ability of the well qualified teacher to guide, it should be conceded, nevertheless, that the time approaches for each individual when differentiated fields of experience are essential.

Certainly at the upper secondary school level, the differentiation of interests has already advanced to such a degree that no teacher is any longer competent to give adequate guidance to all. Not even the integrationist would contend that languages, social and physical sciences, mathematics and industrial and fine arts should be brought together in combined and undifferentiated units of instruction at this level.

Since departmentalization of some kind is inescapable, the question now arises as to whether integration in a departmentalized system is possible. It should be clear by this time that we are not interested merely in the accoutrements of integration but, rather, in the integrated mind and personality of the learner. The verification of such integration is expressed in coherence, correspondence and livability. Knowledge acquired in air-tight compartments of learning may be coherent within itself but unless it corresponds with the realities of life it is false. The final test of correspondence with reality is livability — not for the individual alone, but for society; not for today only, but for an extended future as well.

Now in the traditional school there was sufficient coherence within each unit of knowledge but not enough correspondence with the essential realities of life. The objectionable air-tightness, however, about which we hear so much nowadays was not that primarily between differentiated departments of learning but that which separated each department from the world of reality. The content of knowledge acquired in these air-tight compartments of learning was not truly representative of life — it was meager, unbalanced and frequently irrelevant. When subjected to the final test of livability, such knowledge generally fails.

Up to this point, it seems, no great difference between good conservative and good reformer is in evidence. Both are critical of a traditional education which connected up so inadequately with life and which failed so conspicuously in its livability. But the method by which improvement is to be brought about is the bone of contention. It is a relatively easy task to get intelligent people to come to an agreement with respect to the real goals to be reached; it is all but impossible to bring them to a semblance of agreement as to the best methods for reaching these goals.

Always and everywhere this is true. The conception of method differs not only from individual to individual, but from place to place, and from time to time. The history of education is replete with the rise and fall of method. Teacher training institutions have seemingly been more concerned with indoctrinating their students with the latest methods which soon must be abandoned than with giving them a rich and varied background of practical and universal knowledge. An educational method that rises to ascendency in one generation or in one decade falls into disrepute in the next and is eventually forgotten, while each succeeding method is proclaimed from the housetops as a panacea for all educational ills. Witness the innumerable methods of the last fifty years that have come in with a shout but are now lost in oblivion.

Must Not Restrict Ourselves to One Method

At this stage of the integration movement, we should be intelligently critical of much that passes for evidence in its favor. We should question the advisability of standardizing any method throughout every level of school instruction. It is entirely conceivable that a great variety of methods may be used equally successfully by the competent teacher of any given subject, that the resourceful teacher may be handicapped by being restricted to a single method.

Certainly a method that secures for the pupil a liberal degree of initiative and freedom should not be accompanied by unnecessary restriction on the initiative, resourcefulness and freedom of the teacher. A consistent educational philosophy should take into account the individual differences of both pupils and teachers. Lock steps in the integration movement, as in every other, are to be avoided.

New York Trains Its Rural Teachers

By LOFTON V. BURGE

ANY discussion among educators relative to rural school conditions is likely to bring out the point that one of the chief weaknesses of the rural schools of America is the lack of well trained teachers. This statement is verified when one notes that in many states certification requirements for rural teachers are lower than those for urban teachers. Such was the case in New York State until the new teacher training program, requiring three years beyond high school for all elementary teachers entering service after September, 1934, went into effect.

Formerly, in New York State prospective teachers in the normal schools specialized in some particular phase of teaching, such as primary-kindergarten, rural, intermediate or upper elementary grades. Both the class work and practice teaching centered upon a particular group of children, with relatively little experience pertaining to either children or teaching methods of the other groups.

The photo above shows a practice teacher directing art work in a one-teacher school.

Even in normal periods of placement the graduates of the teacher training institutions had no real assurance of securing positions in their special fields of training, and of course, placement has been even more uncertain for the last five or six years.

Dr. Hermann Cooper, assistant commissioner for teacher education and certification of New York State, points out that 90 per cent of the 1933 graduates now employed secured positions in supervisory districts, that is, in communities of 4,500 or less; and of the number placed, approximately 50 per cent went into one or two-teacher schools.

Among the 1934 graduates 85 per cent of those placed entered supervisory districts and approximately 60 per cent of the number placed went into one and two-teacher schools. Such placement indicates that many teachers entered the rural schools with no training in rural education and with

no understanding of rural children and rural community problems. As a result, rural children, as well as rural communities, have in some cases been exploited, at least for a time sufficient to permit the teachers to become orientated.

The new teacher training program in New York State shows a decided change in both class work and practice teaching. Instead of the former isolated courses in psychology and methods, the revised curriculum for the normal schools provides for a sequential program in child study which aims to give prospective teachers an understanding of children and teaching techniques for all ages and ability levels. A greater emphasis is placed upon adapting teaching techniques to children rather than adapting children to special methods. The new program also provides for a whole semester of practice teaching, of which at least five weeks must be done in the one or two-teacher school.

Multiple Problems in Rural Teaching

Teaching the rural child is not a process wholly different from teaching the urban child. Yet certain phases of the work are different. In the urban situation the teacher usually has one grade composed of children of approximately the same age level and of relatively the same experiences. The urban teacher is under the direct guidance of the supervising principal and special supervisors. In the rural school the teacher has in one room from three to eight grades varying in age level from six to fourteen years. With the multiple problems that such a situation creates, she receives little direct supervision. It naturally follows that the rural teacher who has had no special preparation in this phase of teaching finds difficulty in adapting teaching procedures to her group.

The new state curriculum provides that the normal school shall give the prospective teachers units of work dealing with such instructional problems as the possibilities and limitations of the rural school as a socializing agency, program making, grade grouping, adapting teaching procedures to the school of more than one grade, securing and using instructional materials, and activity units for the rural school. The curriculum further provides for such administrative problems as financing the rural schools, budgeting and expending school funds for supplies and equipment, child accounting as related to the rural schools, buildings, grounds, and both community and professional relationships. The treatment of rural problems may be presented in definitely planned course work or may be given in special conference work, depending upon the convenience of the particular teacher training institution.

In compliance with the new state program and in order to train its graduates to meet the problems that many of them must face, Potsdam provides for a five-week period of rural practice teaching in one or two-teacher schools for all the members of the graduating class of 1935. For the most part, this practice teaching is done in the district schools in the vicinity of Potsdam. This year for the first time, several practice teachers are assigned in supervisory districts of adjoining counties. These students are placed in schools in which there are exceptionally good teachers and which are conveniently located for the district superintendents to give adequate time to supervising their work. The rural supervisors from the normal school pay them one or two visits during their teaching period. The present success of the plan is indicative of its more extensive use in the future.

One distinct advantage of placing practice teachers at some distance from the normal school is that it permits administrative officers of the more remote rural districts to obtain a much better insight and understanding of the work that the normal school is attempting to do. Another advantage is that students are allowed to live at home during their practice teaching period and to commute to the near-by rural schools, thus lessening the students' expenses.

How Practice Schools Are Selected

The schools in which practice teaching is done are selected by the district superintendent in whose supervisory district the schools happen to be located, and by members of the department of rural education of the normal school. No school is selected unless the district trustee and the community as a whole appear sympathetic toward the program. The teacher of the school selected must be doing a highly acceptable type of teaching and must be willing to cooperate with the normal school. The teachers of affiliated schools receive no subsidy from the normal school. But in order that the normal school may be of as much service to the districts as the districts are to the normal school, and in order to show the practice teachers the value of instructional material, the normal school supplements the instructional materials of the affiliated schools.

Insofar as it is possible before their teaching period begins, students are given a day to visit the schools in which they are to teach. During this visit they become somewhat acquainted with the teachers and the pupils. They also confer with the teachers as to the type of work to be done. After these conferences the students are able to plan their work and secure from the normal school

the materials they will need in their teaching. Such preplanning enables the practice teachers to enter into the school work much more rapidly and effectively.

The amount of actual teaching done by the practice teachers depends upon the individual students. The regular teachers give the practice teachers full charge of certain classes as soon as they display ability to do the work efficiently. At no time are the teachers asked to give any work to the practice teachers that might conflict with the philosophy that the school exists for the good of the children. The practice teachers who fail to do acceptable teaching in the early attempts are required to spend further time in observation and participation before trying to teach again. Occasionally, it may become necessary for a student to remain in the affiliated school for an extra teaching period.

The practice teachers are under the supervision of specially trained supervisors from the department of rural education of the normal school, of the regular classroom teachers and the district superintendents of schools. The supervisory program provides that the practice teachers receive help in adapting teaching methods to the school of more than one grade and in working with children of different age grade levels. It attempts to meet the immediate needs experienced by the practice teachers as they are adjusting themselves to their teaching situations.

Observation and Conferences

In addition to ten weeks of teaching in the campus school of practice and five weeks of teaching in the rural schools, all students are given five weeks in which to participate in the school of practice, in planned observations and in daily conferences. The participation period is spent with grades in which the students have not taught or in grades in which they will not be assigned, should the participation period come before their practice teaching.

The observations are presented in the rural demonstration school where the students observe children of different grades working together on class work and activities under the guidance of an expert teacher.

The daily conferences deal primarily with the problems of management and instruction encountered by the groups that have done their practice teaching in the rural schools.

The conferences with the students who have not done their rural teaching treat the common problems of management and instruction. After their teaching period is over, these students are given one day for discussion of difficulties that were not clarified during their field conferences with the supervisors.

With reference to these observations and conferences, the New York State program recommends ten weeks of rural practice teaching with a return to the normal school or convenient centers two days each week for conferences and observations. This plan offers a closer relation between the field work and the conference periods, but it does not permit the students to assume continuous direction of a group of children over a period of time. Further, the plan makes it difficult for students to live in the rural community.

Most of the practice teachers commute from Potsdam to the affiliated rural schools. The expense of their transportation is met by the students themselves. Since the affiliated schools vary in distance from two to eighteen miles from the normal school, each student pays the same amount into the student transportation fund. Some of the students prefer to board in the rural communities near the affiliated schools. The rural department of the normal school urges students who have had no experience with rural life to stay in the country during their entire teaching period.

The program that is followed at Potsdam in accordance with the requirements for rural practice teaching set up for the State of New York has two definite advantages: first, it is probable that after students unfamiliar with country life have spent five weeks in a rural school they may become conscious of the problems involved and may definitely decide whether or not they desire to teach in the rural schools; second, all graduates of the normal school receive training in the methods and techniques of the rural school that will enable them to do acceptable teaching from the day they begin their schools rather than spending weeks or even months floundering about before adjusting themselves to the program.

Next Step in Improving Rural Education

But will these rural teachers equally trained with urban teachers be satisfied to stay in the country schools as long as urban salaries are more attractive? Unless a parity of urban and rural salaries can be brought about, the present teacher training program will tend to make the rural schools largely a transition stage between normal school graduation and urban positions. Of course, one progressive measure aids in bringing about another, and obviously the additional training required for rural teachers will aid in increasing rural salaries. But until urban and rural teachers are equally paid, it will be impossible to retain in the rural schools many of the most valuable and most needed teachers.

Salary Cuts and Restorations

The Department of Superintendence at Work

By A. J. STODDARD

HOW about teachers' salaries? A study just completed by the educational research service of the Department of Superintendence and the National Education Association shows an upward trend. Two hundred and three cities have given information on the status of salary schedule operation. More than three-fourths of this number report that predepression salaries have been restored, in full or in part. The investigation was made at the request of many superintendents and other school officials who were eager to know the status of teachers' salaries and the progress being made toward elimination of salary cuts. A form letter was sent to superintendents of schools in all cities above 30,000 in population and to seventy-eight smaller school systems that subscribe to the educational research service, a total of 403.

Table I shows, on a regional basis, the status of salary schedules for the current year. For the country as a whole, 154 of the 203 cities, or 76 per cent, have restored salaries in full or in part.

Table II shows the history of salary cuts and the first steps toward restoration of salaries for 180 cities which reported complete information by years.

As early as 1932-1933, Peoria, Ill., reported complete restoration of its previous cut. Nineteen of the cities covered in the study began restoration in 1933-1934; 60 more began restoration in 1934-1935; still another 56 followed in 1935-1936, and two cities, both of them in the Atlantic region, reported that salaries had not been reduced at all during the depression.

TABLE I—STATUS OF SALARY SCHEDULE OPERATION IN 203 CITIES, SCHOOL YEAR, 1935-36

Status of Salaries	*Number and Percentage of Cities in:*					
	North Atlantic	*North Central*	*South Atlantic*	*South Central*	*Western*	*Total*
1	2	3	4	5	6	7
Salaries have been restored to predepression levels; salary cuts and contributions are no longer operative.	25 (30%)	4 (6%)	3 (18%)	2 (15%)	2 (8%)	36 (18%)
Salaries have been partially restored; some reductions or contributions are still in effect.	34 (41%)	44 (69%)	8 (47%)	9 (70%)	23 (88%)	118 (58%)
Full reductions are still in effect; no restorations have been made.	24 (29%)	16 (25%)	6 (35%)	2 (15%)	1 (4%)	49 (24%)
Total	83 (100%)	64 (100%)	17 (100%)	13 (100%)	26 (100%)	203(100%)

Withholding of scheduled increment is tabulated as a reduction and the renewal of such increments as a restoration of salary. Shortening of the school term and restoration of school term, when these policies affect the amount of salary, are also tabulated as reduction or restoration of salary.

TABLE II—SALARY REDUCTIONS AND BEGINNING OF SALARY RESTORATIONS BY YEARS, 1929-30 TO 1935-36, 180 CITIES

Year	*Cities Making First Reduction During Stated Year*		*Cities Where Salaries Reached Lowest Level During Stated Year*		*Cities Beginning Restoration During Stated Year*	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
1	2	3	4	5	6	7
1929-30	1	0.6				
1930-31	8	4.4				
1931-32	55	30.6	3	1.7		
1932-33	101	56 1	53	29.4	1	0.6
1933-34	15	8.3	112	62.2	19	10.6
1934-35			12	6.7	60	33.3
1935-36					56	31.1
					No restoration yet	
					44	24.4
Total	180	100.0	180	100.0	180	100.0

When salaries are reported on the calendar year basis, the reduction or restoration of salary is tabulated as in the school year in which the calendar year begins. Withholding of regularly scheduled salary increments is tabulated as a reduction, and the renewal of such increments as a restoration of salaries. Shortening of the school term and restoration of school term, when these policies affect the amount of salary, are also tabulated as reduction or restoration of salary.

Better Budgets

II—Their Presentation and Approval

By W. C. REUSSER

PROVISIONS in the states for the presentation of the budget, and approval of the budget document by the board of education or other approving body are discussed here. Presentation of the budget is usually accompanied or followed by some form of publicity, provisions for hearings or inspection of the document by the public, and leads to the official acceptance or approval of the budget plan. The whole matter of presentation and approval of the budget is rather intimately associated with the fiscal control of the schools.

The term "presentation" as used in this discussion may mean a mere inspection or checking by some body or group, either the budget-making body or some individual or group not connected with the schools, or it may mean the formal presentation to a body that has power to make changes in the budget. By the term "approval" is meant the authority to determine the amount of the budget items and the formal application for tax levies or for appropriations.

To Whom Presented

Presentation of the budget document may be (a) to some person or board for purposes of checking and correction of errors, (b) to an individual or board for purposes of increasing or decreasing the budget estimates, (c) to the budget-making authority or to the electors of the district for purposes of final determination of budget allowance, and (d) to county or state authorities for purposes of making the necessary levies after the budget has been approved.

The first type of presentation is illustrated in the case of California. In this procedure all the budgets are presented to the county superintendent for correction. The county superintendent does not, however, have power to increase or decrease the budget allowance. This is a mere inspection and correction of details. This type of presentation may be useful in aiding the budget-making authority and in keeping budgets within legal tax limitation.

The second type of budget presentation is illustrated in the case of New Mexico, where all school budgets are presented to the educational budget auditor who has authority to approve or to decrease any item in the budget. The board of budget supervisors in Montana has power to change the estimates, although this power may be overruled by boards of education. In this type of budget presentation and approval, there are illustrated various types of fiscal dependence of school boards.

The formal presentation of the budget to the board of education at a stated meeting or to the electors in the annual meeting constitutes the third type of budget presentation. In a large number of cities, the board of education is both the budget-making and budget-approving authority. Presentation to the electors for approval by majority vote is common in many states, especially in rural school districts.

The fourth type of budget presentation is made to the body that has authority to levy taxes or to make appropriations. Such presentation is usually made after the budget has been approved, although this is not always the case. In Missouri the budget is presented to the county clerk, who determines the tax levy necessary. In Louisiana it is presented to the parish board which authorizes the tax levy. In Connecticut the budget is submitted to the board of finance, board of selectmen, or the authority making the appropriation, but such board or appropriating body does not have power to reduce the estimates of the board of education.

Publication and Hearings

Different types of publication of the proposed budget are used by the various states in their budgetary procedure. Publication in a newspaper of general circulation throughout the city or county is the most common type. This publication usually precedes the adoption of the budget, and is made a sufficient time in advance of the approval of the budget to allow for corrections, hearings and protests that may be offered. In a few states, publication of the budget is made after final approval as in the cases in which the budget is published in the annual report.

Another form of publication is the posting of the proposed budget or a summary of the budget in the notices for the meeting of the board or the electors at which adoption of the budget takes place. In some states publication of the budget is required only when additional taxes must be voted by the electors.

A number of different types of budget hearings or inspections are provided for in the procedure of the different states. Sixteen of the states provide that boards of education must hold hearings on the proposed budget. Notices are usually given of the time and place of meeting where such hearings will be held, and any of the electors of the district may attend to offer criticisms for or against any part of the budget. At such meetings, the proposed budget is fully explained, new policies are defined and proposed increases or reductions are defended.

In some of the states the budget is placed on file with some county official or with the clerk of the board of education. Notice is given of such filing and any interested citizen may inspect the proposed budget before it is approved.

It is doubtful whether any of the provisions for publications or hearings of the proposed budgets quite fulfill the purposes for which they are intended. Publication of the budget before its adoption and hearings is based on the theory that the public is interested in the proposed budget and should be given a voice in its determination. In practice, little is accomplished by these procedures.

Approving Authority

Writers on school finance are agreed that the final approval of the budget as the determination of the fiscal policies of the school unit is a legislative function and belongs to the electors of the district or their representatives, the board of education. While it is true that the final approval of the school budget is left largely to the voters or the board of education there are many notable exceptions. In twenty-two states there is some degree of fiscal dependence of boards of education.[1]

While complete fiscal independence of boards of education has been advocated by authorities in school administration, there appears to be some evidence that fiscal independence in itself does not guarantee better schools. The advantages of fiscal independence should be weighed in the light of the advantages to be gained by a degree of fiscal dependence which seeks to coordinate all the spending agencies of local governments within a state.

[1]Mort, Paul R., National Survey of School Finance, State Support for Public Education, American Council on Education, Washington, D. C., 1933, pp. 185-187.

In thirty states the boards of education or the qualified electors of one or more types of districts have final authority in determining expenditures for the ensuing year. In New Mexico all school budgets must be approved by the county school budget commissioners consisting of two taxpayers and the educational budget auditor. This commission has authority to decrease budget items. A second approval must be given by the state tax commission.

Between approval by the board of education or the elector, and approval by a budget commission and state tax commissioner, there are varying degrees of fiscal dependence of boards of education.

The Montana board of budget supervisors may make changes in any school budget, but such changes may be overruled by a majority vote of the board. In North Dakota a board of budget review consisting of seven members, two from the school board, two from the city or village, one from the board of education or county commissioners, and two at large, serve as the body that reviews and approves a school budget. In Arkansas budgets in school districts having a city of 2,500 or more population which employs a superintendent are approved by the city superintendent, and need not be submitted to the county board of education. In Arizona the board of trustees approves the budget except in cases in which money is to be raised for the purchase of sites or the erection of school buildings. In this case the board of supervisors may use its discretion in making the necessary levy. In Indiana budgets are subject to approval or reduction by the state tax board on the appeal of ten resident taxpayers of the district. In Michigan a county board of review examines all school budgets and has power to make certain changes.

The time of approving budgets in most of the states is before the beginning of the fiscal year. A few states permit changes and final adoption after the opening of the fiscal year. In thirty-five states, the final date of budget approval is July 1.

Present Trend

The tendency in recent legislation concerning school budgets is to make boards of education more and more dependent upon county, city or state agencies. Two tendencies may be responsible for this trend: (a) the desire by the taxpayers to place a check upon the spending agencies of local governments, and (b) the desire of legislators to set up certain agencies that will coordinate the activities of the spending agencies of local governments.

A third article in this series will discuss the provisions for administering the school budget.

Do Extra Tasks Add an Extra Day to the Teacher's Week?

By M. L. ALTSTETTER

TWO trends in educational practices of the last fifteen or twenty years definitely influence the daily task of the classroom teachers in the secondary schools. They markedly affect the teacher's load and therefore require the consideration of both administrators and the public. One of these trends is the shifting of emphasis from assimilation of subject matter to pupil development and welfare, and the other is the greater democratization of school administration.

Extracurricular activities have now been accepted as both a proper and necessary part of the school program. The literature on the subject leads one to conclude that every teacher shall not only have a definite responsibility in the matter of student activities but that it is advantageous to the teacher to share in them.

All activities must first find their justification on the basis of pupil welfare. If they are also of value to the teacher, surely time devoted to them is justified. Various studies, as well as the opinions of writers on the subject, indicate that forty-five minutes daily may properly be devoted to home room, the assembly and the meetings of clubs and other organizations. Even if each teacher has one of these daily periods free, this means that she devotes three hours a week to these activities. This does not include time given by sponsors to advising and planning; many hours given daily for several weeks at a time to the coaching of a play, a debating team, a glee club or chorus, an orchestra or band or athletic teams.

Recent years have given increased importance to pupil guidance. Group guidance may in considerable measure be cared for in classroom and pupil activities situations. But effective guidance is largely individual. Even though there are deans of girls and of boys, a psychologist and other guidance officials on the school staff, yet each of these is dependent largely on information supplied by the individual teachers. A great variety of data must be collected, especially in the case of problem pupils, and each teacher is expected to contribute any information that is significant. This may be semi-annual reports of estimates on her pupils' personality traits; parts of conversations with a pupil or between pupils; information regarding home or home life; or incidents in class, in the corridors, on the playground, on the street, in the home rooms, or at a club meeting.

Every teacher enjoys the confidence of some pupils more than does any other staff member and these confidences are valuable for guidance and should be encouraged. Individual and small group conferences growing out of classroom situations seek to prevent failure or correct wrong habits or attitudes. Not unusually and very properly and profitably teachers are required to set aside regular office periods for conferences with pupils who are invited or come voluntarily. The total amount of time devoted to such guidance tasks will vary greatly from week to week and among teachers. Two hours a week is certainly a conservative estimate.

Community Demands on Teacher's Time

Generally teachers are expected to manifest an active interest in community life. This is by no means new and is a proper demand. Parent-teacher association work, teaching a Sunday school class, singing in the church choir, or membership in women's clubs may mean not only time for attendance but also for preparation. Probably more important is the definite expectation that each teacher will interpret the schools to the community. Visitation of homes is encouraged. Time for such duties is again a variable, one to three hours a week representing neither the minimum nor the maximum.

The study hall has claimed and still claims as much as four or five hours a week of many teachers' time. The task was largely that of keeping order, until supervised study presumably became the teachers' assignment. Now the trend seems to be toward combining study hall and library and assigning some library service to classroom

teachers, not as librarians but as supervisors of study and as aids to the librarian in the use of the library and its materials. The average time per teacher for such work is probably being considerably reduced but still requires several hours a week.

A wider distribution of administrative tasks has added to the teacher's duties as well as her dignity. The centralized autocracy is being displaced by a democratic organization which enlists the cooperative aid of the entire staff. The selection of textbooks is a task in which every teacher has a share. The revision of the school curriculums and the departmental offerings requires the genius of all, even though a committee may have been designated to do the major part of the work. There may be a committee on athletics, one on community relationships, another on pupil activities, and various other standing or special committees. There are faculty and departmental meetings in which the principal or department head has only a minor share and even a minor responsibility, classroom teachers being responsible for the rest. All these things challenge the teacher to growth and are therefore commendable.

Administrative Aid From Teachers

In the same spirit are teachers more and more being called on to help formulate the school objectives and determine school procedures; to organize a school testing and measuring program; to determine achievement standards; to carry on experimentation, do research and publish. They are asked to evaluate the suitability and efficiency of school supplies and equipment and to make recommendations. Their suggestions are sought in making up the annual school budget and they may be responsible and accountable for some expenditures. Besides participation in local and county educational organizations, it is hoped that state and even national associations will seek their advice and assistance. To many teachers these tasks mean many hours of work a week, to a few only two or three.

There are a number of factors or conditions that individually make little demand on the teacher's time and yet may add to her load because of additional energy required or because of depressing and discouraging influences. There may be a limited amount of or no clerical help. The ability or previous training of pupils is often below that desirable for the grade level of the subject taught. There may be no or inadequate supervision. School spirit and organization may be such that discipline is a real task. Library facilities, laboratories, equipment and mimeographing facilities may be limited. Social and living conditions in the community may be unsatisfactory. Buildings and grounds are often poorly kept, are unattractive and even depressing in appearance, and malodorous and unclean.

In some schools a new teacher finds customs markedly different from those she has known, a language spoken that is foreign to her or an environment to which she is not at all accustomed. Sometimes previous training for some subjects she teaches is limited. The school day may be long. Her task may be a conglomerate made up of elements which defy organization and which take her to all parts of the building and grounds.

The list is not complete but is illustrative. No one teacher is confronted with all of these factors but it is highly probable that several of them add to her load. They are an important consideration and must not be ignored by the principal.

Extracurricular activities, guidance, community service, library or study hall duty, and a share in the school administrative program are all definitely approved and worthy duties which it is expected the teacher will perform and which the teacher may wish to have assigned to her in addition to teaching. These duties total an average of at least two hours each school day. It is not claimed that each teacher devotes ten hours a week to these duties, but many give far more than that.

The administrator, supplemented by pupil, parental and community demands, does not actually assign nonteaching tasks totaling more than a full working day a week probably. Yet it is true that not uncommonly it is taken for granted that teachers will do all of these tasks or their equivalent, with no thought of the untoward factors mentioned in the preceding paragraph.

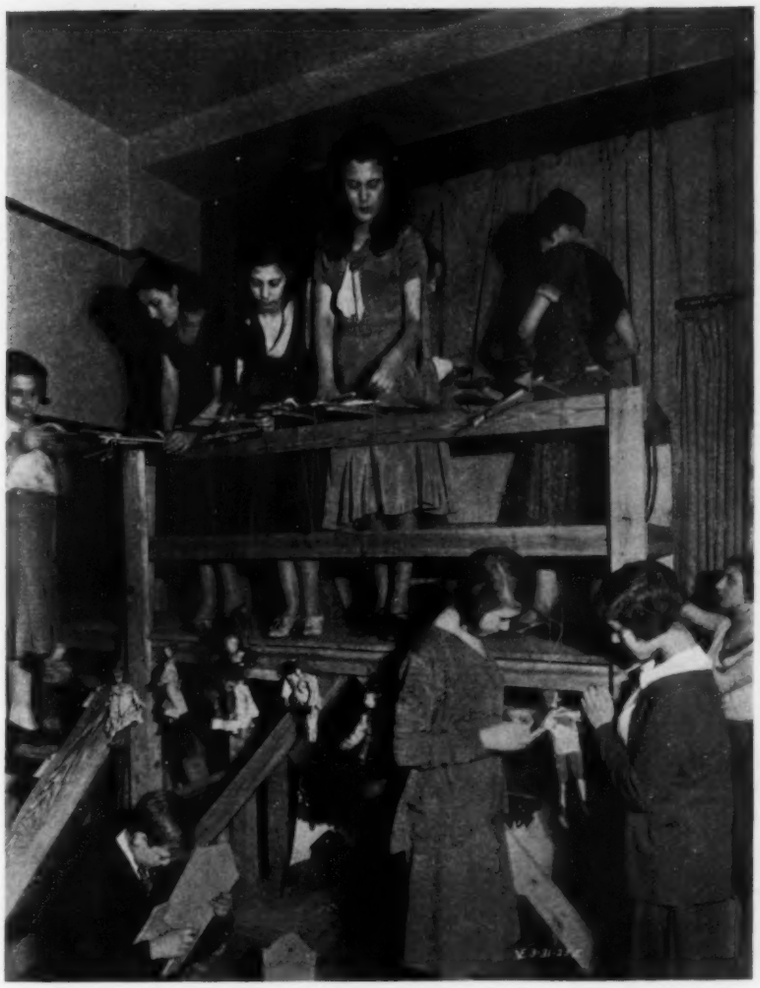
Sixty-Hour Week for Many Teachers

If four hours of teaching a day is the assigned load and this requires four hours for preparation, the formulation of tests and the grading of papers, it is evident that neither the old NRA codes nor legal regulations for women are observed in determining the teacher's load. Use of the project, problem or large unit method of teaching requires more time for preparation than does the textbook recitation method and more rather than less than an hour of preparation for each hour of teaching.

In many cases a summation of all the factors involved constitute a working week of from fifty five to sixty hours, and even these figures are not the maximum. And it must be remembered that teaching is not mere manual labor but involves constant stimulation and enervation of delicate nervous tissue.

Puppets Correlate Home and School

By LAURA A. PENNY



Backstage during a show in a Detroit intermediate school.

THE puppet show in the junior high school in San Luis Obispo, Calif., supplements the so-called fundamental subjects by correlation with them and by furnishing an opportunity for original expression in the arts. The show furthermore projects itself into the community, thus correlating the home and the school.

Typical audiences are composed of friends and parents, many of whom have been patrons of former shows. Many have, perhaps, seen puppet characters come to life in their own homes during a young puppeteer's leisure time and have looked forward eagerly to the evening of the performance.

A typical program on which the present discussion is based appears on the next page.

The puppet show correlates with fundamental subjects, as follows:

1. Business Training: Assembling, arranging and mimeographing the programs give the final touch of reality to the undertaking, although the setting of the date, the advance ticket sale, and backstage organization do their share also. The show whose program is here reproduced was advertised through news articles; a paid advertisement in the *Daily Telegram* obtained through a club member who was a newspaper route manager; posters; linoleum blockprint handbills and penny postals; advance sale of tickets, and a trip with puppets to the elementary schools. Posters made by club members were also used, of which those produced by the artist members were the best. The general business of advertising was efficiently handled by those members who were perhaps lacking in art ability but were nevertheless valuable to the show in other capacities.

Daily club periods before the show, presided over by the club president, became meetings where plans were made and discussed.

2. Woodshop Correlation: A tumbled body caught in the strings which gave it life is indeed a tragic occurrence for the young puppeteer. Out of such accidents grew plans for a puppet rack as well as a bridge-rack combination. These plans were approved by the woodshop and were carried out by boys in the department who earned complimentary tickets to the show thereby, and the privilege of a backstage visit.

PROGRAM

I

The Fairy and the Doll—Violet Cline and Agnes Reycraft

II

Raggedy Ann's Mysterious Disappearance

Play written by Barbara Francis and Mary Ann Ott

Act I Nursery

Act II Scene 1, The Deep Woods; Scene 2, The Hut

Act III Nursery

Raggedy Ann.....Mary Ann Ott
Raggedy Andy.....Barbara Francis
Cleeto.....Violet Cline
Babette.....Barbara Murphy
Uncle Clem.....Patricia Pitts

III

Song: "Kiss Me Again".....Betty Jane Redfield

IV

Horsefeathers.....Puppeteer: Marian Polin

INTERMISSION

V

The Three Little Maids, from "The Mikado"

Operators and Singers: Jean Gilfillan, Frances Yamasaki, Myrna LaRue

VI

Señorita Rosita Morena.....Esther McGhee

LaCucharacha, Isle of Capri

VII

The Mad Tea Party — A One-Act Play

Mad Hatter.....Harrell Fletcher
Alice.....Dorothea Baldwin
The March Hare.....Robert Snowman
The Dormouse.....George Stockdale

These puppeteers made the puppets they operate: Agnes Reycraft, Violet Cline, Barbara Murphy, Patricia Pitts, Betty Jane Redfield, Marian Polin, Jean Gilfillan, Frances Yamasaki, Myrna LaRue, Esther McGhee, Harrell Fletcher, Dorothea Baldwin, Robert Snowman.

* * *

Stage manager and lights.....Lawrence Bradbeer
Properties, tickets.....Frances Fletcher
Head usher.....Violet Cline
Japanese scenery.....Esther McGhee
Furniture.....Robert and Wilfred Champlain
Sponsor.....Art Department

March 1, 1935

Afternoon, 3 o'clock; evening, 8 o'clock.

3. Home Economics Correlation: The lovely vision in black lace who sang "Kiss Me Again" on the program had a parasol and hat of black lace, a ring on her finger, and wore embroidered pantalets. All her clothes were beautifully planned and made, revealing as much artistry as her daintily modeled features and her matchless complexion.

The creator of the fairy in "The Fairy and the Doll," in striving for perfection made four successive costumes, the final one of which she used on the night of the production. Such a waste of energy and material to complete a character! The child needed instruction in costume design and sewing in the home economics department, and her experience with the fairy's costume influenced her later decision to register for these subjects.

4. Electric Shop Correlation: Footlights, side and overhead lights, three changes and a dimmer manipulated by the stage manager and electrician lighted a hut at noon and at night, a Japanese garden, and the deep, deep woods.

The puppet show correlates with the arts. It offers creative expression in sculpture, painting, music, literature and architecture. Two literary members of the club cast the beloved characters of Raggedy Andy stories into a three-act play written by them. The cherished dolls were renovated, limbered up and strung, and walked and talked through exciting adventures. Entitled "The Mysterious Disappearance of Raggedy Ann," the play was read to the club by its coauthors, was approved, and went into rehearsals.

"The Three Little Maids" from "The Mikado," a number sung by the girls' glee club, inspired one act for the marionettes. The act made its first appearance in an honor scholarship assembly and was repeated for the big show. Three girls made the Japanese marionettes and sang for them as they fanned and curtsied or moved coquettishly through the garden together to the rhythm of their song. One of these was a Japanese girl, who, with the help of her mother, created a fascinating little bride. The best painter in the club painted a backdrop of cherry trees and Mt. Fujiyama.

The puppet show contributes to character education in several ways:

1. Social Obligation: Dancing eyes and a wide smile, a breathless report of, "We sold seventy-five tickets at Fremont — all we had"; "We couldn't go on until we came back for more"; "There are so many people coming"! Feet tired from escorting puppets through fifty schoolrooms! The public — an obligation, a social responsibility. The feeling of compulsion to carry on, each performer saying to himself, "I will train my puppet; I will get expression into my part of it; I will do all I can for our audience." Such is the thrill in being an important part in an endeavor where a great deal is not too much to expect. Rehearsals were held at 7 a.m., at 12:30 p.m., at 4 or at 6.

2. Leisure Time Occupation: By working weeks and months during spare hours, an active girl draws and plans a puppet horse such as she has never seen before, a horse to be made all of papier-mâché with joints and strings to put it through amusing antics. The act "Horsefeathers" in which it later appeared was so named because of the ostrich feather boa which was trimmed into a mane and tail for the puppet. The absorbed delight of the puppeteer as her horse stepped to the strains of a Sousa's march played on a phonograph was a pleasure to see.

Puppets, puppeteers and racks at the San Luis Obispo junior high school.

After the show the audience who came backstage felt of the velvety nose, inspected the mobile joints in the fetlock, knees, shoulders, neck and back. The horse had rubber tire tube ears, painted with poster paint as carefully as the horse itself; the ears lay back when pulled by a string through screw eyes behind the ears. Sheet-lead horseshoes marked the stepping in the dance on the muslin covered stage floor. Papier-mâché was applied over a wood foundation; joints were made to bend so far, just so far, as horse joints do.

3. Fundamental Processes of Learning: One of the cardinal objectives in education is command of fundamental processes. Winona Howard writes: "The whole world is kept progressing by thinkers who use originality and doers who have initiative; therefore creative expression *versus* imitation is desirable. The individual who expresses his own ideas freely in his own way must be one who knows how to observe, to study, to plan and to act." The girl who built the horse puppet exemplified this creative expression.

4. Use of Discarded Materials Gives Opportunity for Originality of Thinking: The puppet show furnishes a character education activity that has its beginning in discarded newspapers, rags, and woodscraps. Animal marionettes are often made entirely of papier-mâché (pulverized newspaper and flour paste). They are sometimes made of cloth. Marionettes representing human characters are successfully made of the following materials: for the head, papier-mâché; for the body, cloth or wood; the hands, wire frames, cotton, strips of paper, paste; the feet, cloth or wood; clothing, scraps of silk, ribbon and lace. In addition to these, there are many other combinations of material with which all workers with puppets love to experiment.

The puppet show does not take the place of the basic school curriculum. It offers to pupils dashing here and there in search of facts and dates a place to develop their ideas and to experience in a normal social environment the principles taught in social science, mathematics, languages and the arts. With proper guidance, pupils discover how to make use of time, energy and material, gaining meanwhile satisfaction in the pursuit of that which gives them greatest delight.

Happy To Say —

FORTUNATE are you if you have a river or grove or any spot you loved in childhood or youth. My old crony, Harry Waters, yesterday took me riding to visit the school in which he first taught. The building was gone. Consolidation is taking much better care of the youngsters of the district today. But we sat by the side of the road and smoked memorial pipes to his memory of an old love. It strikes me that it is worth your while to make the place where your main job now is a memory that will be a future happiness.

OFTEN you hear afterward, "That was a red-letter day." Seems to me it is fine to mark the day in red beforehand. I notice that a large schoolbook house issues a calendar marking in red the days when school is not in session. It would be a fool thing for a school worker to accept the implication of this coloring — vacation more important than vocation.

THE presence of a lazy or selfish teacher or two in your school system prevents you from believing what you say when you tell the staff, "You are the salt of the earth." It is regrettable that so much of the urge upon teachers to grow has to come from the superintendent. All the same, it is impossible to contradict you when you tell them that teaching is full of prime opportunities to develop teachers into admired personalities second to none. I have never known a school system unblessed with generous and growing men and women. These folk are worth praise. Their traits are contagious. Encouragement of them to speak at teachers' meetings has more effect on staff morale than your superintendent's most enthusiastic exhortations.

MORALE is the aim of all successful administrators responsible for the success of persons in organizations. Do you realize what it means? It is their mental state as concerned with courage, confidence, zeal and zest. It is not engendered by unfounded flattery. Specific praise nurtures it. Honest respect and admiration feed it. Recognition that we are all enrolled in a great adventure keeps it whole and growing. I have never known sincere regard from an honest leader to be wasted on a teaching staff or to fail to make them more respectable.

I HAVE known superintendents so afraid of being thought naggers that their supervision of teaching was nothing at all. They fuss with letters, callers, material things. They want to be regarded as business men. But the main duty of superintendence is the improvement of teaching. The best teaching of today must be better tomorrow or it lags behind medicine, surgery, engineering and all professions. Every advance a teacher makes is due to impulse and guidance. If these are self-generated it is well, but not enough. What makes outside impulse and guidance appear to be nagging is a sense of irritation felt by the teacher. Irritation doesn't remove irritation. Be soothing and firm. It can be done.

Lou McCandrew

THE SCHOOL PLANT

Secluded behind venerable trees stands the new Unadilla Central School of New York State. An old building at the rear of the site was transformed into the shop and bus garage shown below. On a side street is the auditorium-gymnasium entrance to the new building, the Ionic columns of which are shown on the opposite page, along with three interior views which are self-identifying to the reader.

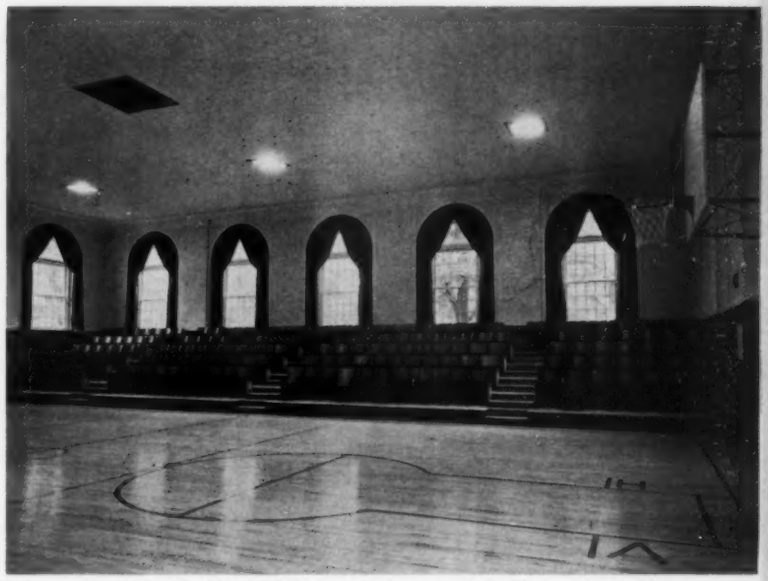
When Tradition Joins With Modern Needs

By GLENN C. HARRIS and GEORGE BAIN CUMMINGS

IN APPRAISING the work of an architect it is always necessary to understand the terms of his program, the limiting conditions and fixed factors with which he must work.

In treating the Unadilla Central School, the architects were given, first of all, a lovely New York State village rooted in early history, with native Indian traditions, with streets lined with graceful elms and venerable maples, and bordered with trimly kept lawns and houses.

Second, there was given to the architects a modern, forward looking educational program, having as its foundation the course of study of a village academy of venerable age and proud record, amplified and rounded out by the carefully formulated curriculum now presented by the department of education to centralized rural schools.



Third, the architects were given a definite site, which was that occupied by the old academy, with the addition of other parcels of land adjoining it. This afforded an area of approximately five acres fronting upon the main street of the village at the corner of a minor street. The site was bordered with lovely trees of mature growth, and lining the approach to the old school building stood two pairs of ancient maples which all agreed should continue to identify the main approach.

On the rear of the property stood a separate building connected by a corridor with the academy. The building contained the auditorium-gymnasium for the old school. Inasmuch as this separate building had been built not many years ago, had not yet been fully paid for and was in too good condition to justify demolition, it was accepted as a factor to be utilized in planning the new building.

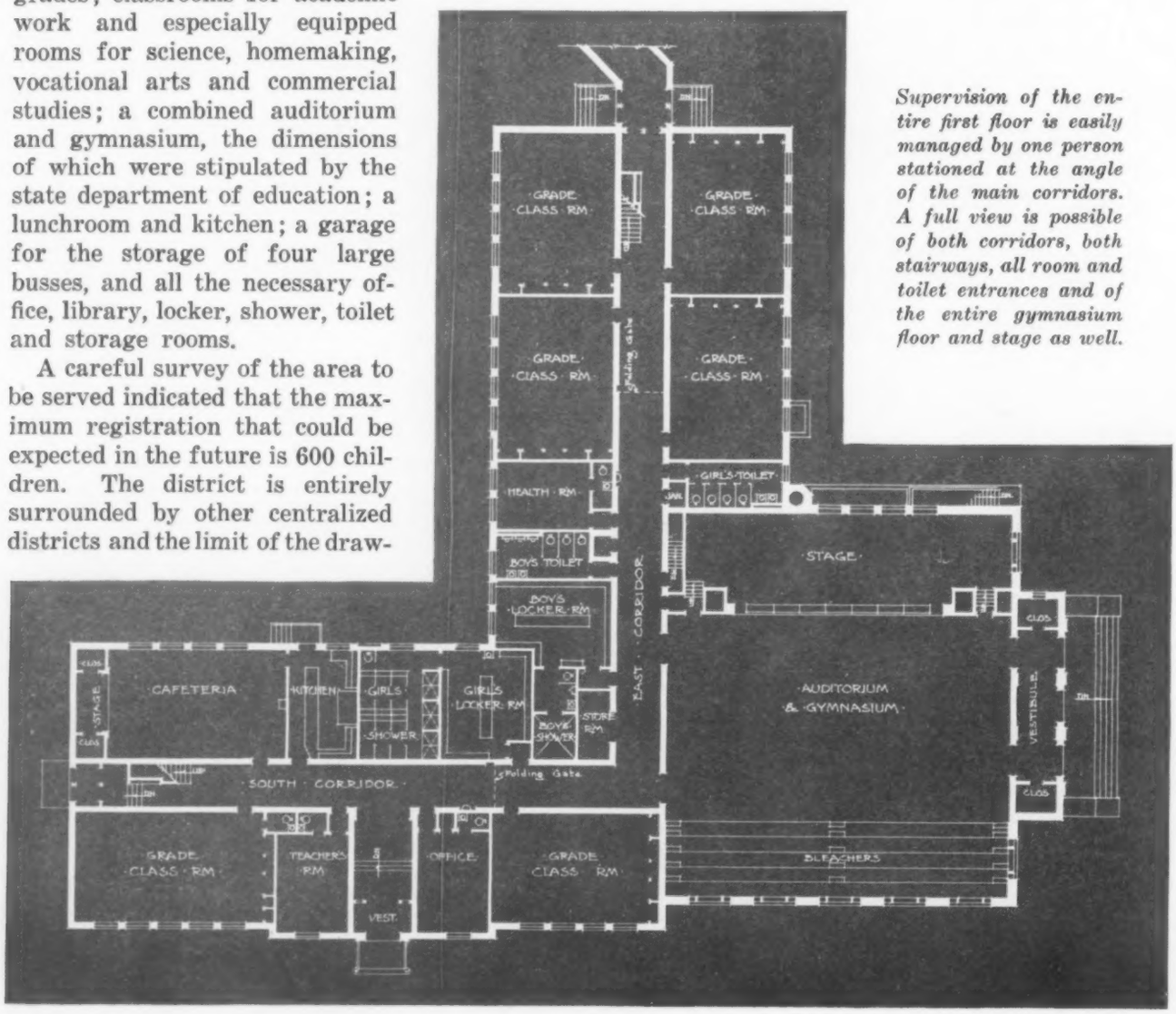
The educational program called for a "six-six" scheme of organization, with one standard classroom of maximum size for each of the lower eight grades; classrooms for academic work and especially equipped rooms for science, homemaking, vocational arts and commercial studies; a combined auditorium and gymnasium, the dimensions of which were stipulated by the state department of education; a lunchroom and kitchen; a garage for the storage of four large busses, and all the necessary office, library, locker, shower, toilet and storage rooms.

A careful survey of the area to be served indicated that the maximum registration that could be expected in the future is 600 children. The district is entirely surrounded by other centralized districts and the limit of the drawing power is clearly defined. Variations in district population, assessed valuation and school registration have been small over a long period, and nothing would likely increase the probable registration beyond 50 per cent.

The plan was to prepare housing for a complete modern educational program including all regular and extracurricular activities of the children, and to care for such community activities as might reasonably be expected to use a school building and its equipment.

The form of plan finally determined upon is irregular but built around an L-shaped corridor, and places all of the necessary elements on two floors, with the exception of rooms for the vocational arts and the bus garage, accommodations for which were satisfactorily made in the old gymnasium-auditorium building at the rear of the site.

Access to the main portion of the school is by means of the path bordered by ancient maples and extending from the main street in the same loca-



Supervision of the entire first floor is easily managed by one person stationed at the angle of the main corridors. A full view is possible of both corridors, both stairways, all room and toilet entrances and of the entire gymnasium floor and stage as well.

tion as the original entrance to the old academy. Three pupil entrances are provided, in addition to the main entrance, to which access is obtained from Main Street, from Noble Street and from the playground.

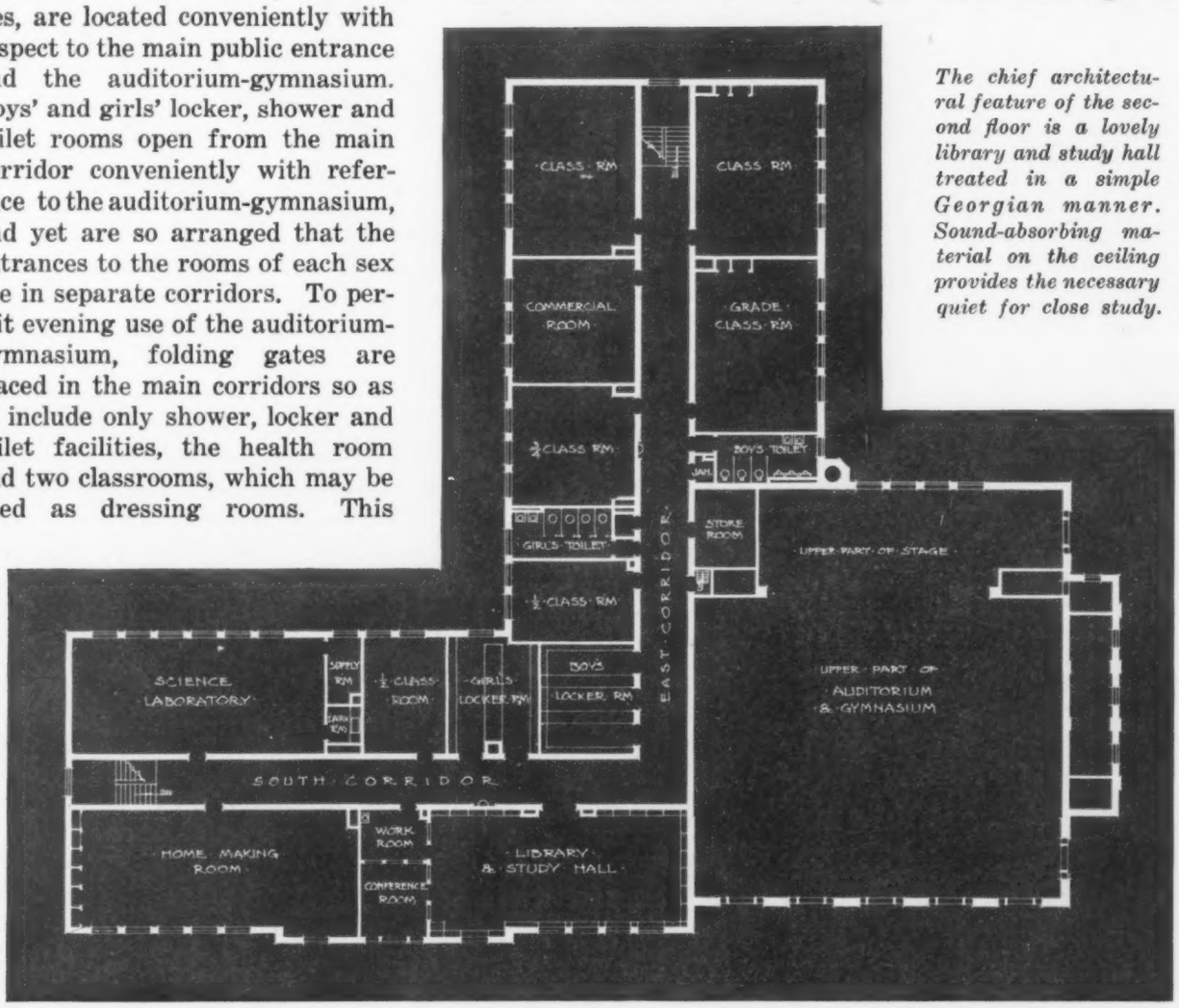
The auditorium-gymnasium opens from the main corridor of the first floor on the one side and through a vestibule from Noble Street on the other side. The service driveway and parking area are entered also from Noble Street. There is direct outside entrance by means of a ramp from the driveway to the agricultural shop at the rear. A covered passage at the first floor level connects the rear of the first floor corridor with the shop garage building, and it is therefore possible for pupils to go, under cover, to and from shop classes and to and from the busses. The noise of the shops and garage is inaudible to the rest of the school because of their being located in a separate building.

On the first floor of the main building are the rooms for the lower six grades. Special provisions are made for the youngest children in lieu of a separate kindergarten room. An office, a teacher's room and a health room, with their usual facilities, are located conveniently with respect to the main public entrance and the auditorium-gymnasium. Boys' and girls' locker, shower and toilet rooms open from the main corridor conveniently with reference to the auditorium-gymnasium, and yet are so arranged that the entrances to the rooms of each sex are in separate corridors. To permit evening use of the auditorium-gymnasium, folding gates are placed in the main corridors so as to include only shower, locker and toilet facilities, the health room and two classrooms, which may be used as dressing rooms. This avoids the necessity for heating and supervision in other parts of the building.

A storeroom for gymnasium apparatus, a fireproof vault for the storage of school records and a janitor's cleaning closet are provided in the first floor plan. The lunchroom or cafeteria for nonresident pupils occupies one corner of the first floor. It is equipped with a small stage and closets at one end, which are made use of for programs of public speaking and music. The cafeteria adjoins a fully equipped kitchen. This room has direct outside connection for the handling of food stuffs and refuse.

Supervision of the entire first floor is easily managed by one person stationed at the angle of the main corridors. From this station a full view is possible of both corridors, both stairways, outside entrances and all room and toilet entrances; at the same time the entire gymnasium floor and stage are in full view.

The combined auditorium-gymnasium is a flexible unit with a maximum seating capacity of 600 when set up with the folding chairs. When not in use, these chairs are folded and stacked upon trucks which are rolled under the stage. The



The chief architectural feature of the second floor is a lovely library and study hall treated in a simple Georgian manner. Sound-absorbing material on the ceiling provides the necessary quiet for close study.

portion of the floor thus vacated provides a basketball court with boundaries 35 by 60 feet and a border 3 feet wide all around.

At the side of this space and facing the stage are five raised platforms, containing fixed theater chairs. With the use of these and chairs upon the stage, which has a proscenium opening 40 feet wide, more than 300 persons may witness a basketball game.

The stage is 20 feet deep and is fully equipped with the necessary items of stage rigging for the production of school dramatics and entertainments of all kinds. Standard classroom window lighting at the rear of the stage makes it possible to use this space for music classes. At either end of the dignified public vestibule are small rooms for ticket selling and office or storage purposes.

Lower Walls Linoleum Covered

The side walls of the auditorium-gymnasium are covered with linoleum to a height of 7 feet, minimizing the danger of abrasion in the course of spirited play on the floor. The floor of this room is maple laid in strips. The upper walls and ceiling are plastered with sound-absorbing plaster and the acoustics of the room is excellent for all purposes. Night lighting is by means of large reflecting units, the faces of which are flush with the ceilings.

On the second floor, the chief architectural feature is a lovely library and study hall treated in a simple Georgian manner, with wooden bookshelves and cupboards on all walls, and an ornamented entablature. Sound-absorbing material on the ceiling provides the quiet necessary for study purposes. Opening from this room are a conference room and a workroom.

The science laboratory with its supply room and darkroom, the homemaking room with its division between cooking and other household arts, and a special room for commercial studies are provided on this floor, which is for the use of the upper six grades. In addition, there are two grade classrooms and four other classrooms of varying sizes, which complete the complement of pupil stations on this floor. Locker alcoves for the high school boys and girls open on separate corridors; and finally there are the toilet rooms, storerooms and cleaning closets corresponding to those on the floor below.

The mechanical plant is located in the basement, which extends under only a small part of the building. The system of heating is low pressure steam, the heat being furnished by twin boilers, each of which is equipped with a pair of oil burners. The auditorium is ventilated by means of a fan located in the basement. Ventilation of the rest of the building is provided by means of heating and ventilating units located in each room. Storerooms and direct outside access are provided in this basement space, so that coal can be used as fuel if desired. The rest of the area under the main building is excavated to a sufficient depth to permit access to all pipes, valves and conduits. A toilet and shower are provided for the janitor at the basement level.

The floors of all corridors and toilet rooms are terrazzo. The floors of all classrooms are of blocks made of maple strips laid in mastic upon the concrete floor slab. Asphalt tile is used for the floors of the cafeteria, office and similar rooms. Sound-absorbing material is used on the ceilings of all corridors, the cafeteria and the commercial room, as well as in the library-study hall and auditorium-gymnasium. Marble slabs are used as toilet stall partitions. The building is equipped for the use of cooking gas; for the future installation of a central vacuum cleaner; for the future installation of sound apparatus, and is currently equipped with a program clock system and telephonic intercommunication among all rooms. Standpipes and fire hose cabinets are distributed about the building and there is an automatic electric fire alarm system. Lighting fixtures are of the most scientifically designed type. Visual instruction is provided for by a stereopticon plug in each classroom and in the auditorium-gymnasium.

Red Brick With Limestone Trim

The exterior architecture is that of the post-colonial period, the Ionic order being used in embellishing the entrance to the auditorium-gymnasium. A red colonial brick with limestone trimming and a blue stone base is used for the exterior, the brick being backed up with hollow tile units. The interior partitions are of hollow tile. The floor and roof systems comprise bar joist framing with concrete slabs 2½ inches thick supporting the floor finish. The roof is covered with a composition roofing with slag finish and the building is thoroughly flashed with copper metal.

Birch woodwork stained a warm brown has been used throughout for interior trim. The windows are double hung, of wooden construction and all interior doors are of the flush type. Drinking fountains are recessed in the corridor walls and lined with glazed tile. Stairs are of steel construction with terrazzo treads and platforms.

A three-year program of landscaping of the grounds is under way, which will eventually complete the planting of shrubbery and the laying out of game and athletic courts. Plots at the rear will provide for experimental work by the agricultural department and flower beds for the grades.

Delivered by Bus

A proposed plan for state aid for transportation of New Mexican school pupils

By R. J. MULLINS and RAY L. HAMON

THE state of New Mexico spent $544,866 in 1933-1934 for transporting 20,491 children to public schools. The range of cost per child transported was from $43.50 in Lea County to $9.05 in Bernalillo County, with an average expenditure of $23.91 per child transported. The range of the total amount spent for transportation was from $150 in Catron County, where only eleven children were transported, to $52,201 in Roosevelt County, where 1,874 children were transported.

Nine counties of the state transported more than 40 per cent of the pupils in average daily attendance as follows: Roosevelt, 73.6 per cent; Harding, 70.5 per cent; Quay, 68.2 per cent; DeBaca, 57.7 per cent; Curry, 48.6 per cent; Union, 48.0 per cent; Lea, 43.4 per cent; Torrance, 41.8 per cent, and Lincoln, 41.0 per cent.

In Roosevelt County, approximately 1,000 of the 2,545 pupils in average daily attendance attend the Portales municipal schools of whom 500 are transported. Of the remaining 1,545 children in average daily attendance in the rural schools, 1,475, or 94 per cent, are reported as being transported. Similarly, 97 per cent of the rural pupils of Quay County, 78 per cent of the rural pupils of Curry County, and 70 per cent of those in Union County, are transported.

The average annual cost per pupil for instruction of the 87,995 pupils in average daily attendance was $56.83. Since the per-pupil cost of transportation was $23.91 for those pupils transported, it is evident that, for this group, transportation costs 40 per cent as much as instruction.

Every State Transports Pupils

Every state in the Union transports children at public expense and transportation has been generally accepted as a legitimate part of the tax program of the counties. The feasibility of consolidation of schools and of transportation of pupils to a central school has been successfully demonstrated by New Mexico as well as most of the other states. By this means, a high school education has been made possible for thousands of children in isolated communities which would not have been available otherwise. The soundness of the policy is generally accepted, but the problems of its administration have not been definitely standardized.

While transportation is not a direct expenditure for education, it is a necessary auxiliary to education and is of the same nature, therefore, as the burden of providing teachers and equipment. A community that must transport its children has the expense of transportation in addition to the other expenses of the community that maintains schools within reach of its pupils, and is thus handicapped by a necessary noneducational expenditure. A program of distribution of state funds for the aid of schools must, therefore, necessarily consider the cost of transportation.

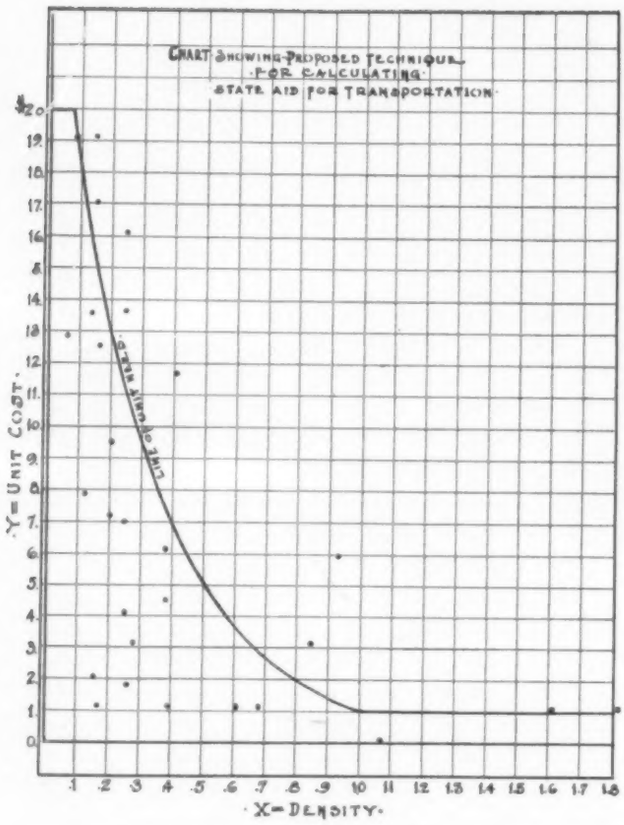
The generally accepted philosophy of state aid in the support of schools is to equalize the burden of school support and the educational opportunities to children in the various school units. If this principle is to be effective in New Mexico, a more definite program governing the distribution of state funds for transportation is necessary.

Defects of Present State Aid System

Some of the most outstanding defects of the present method of state aid for transportation are: (1) transportation of pupils living less than statutory distance from school and otherwise committing the state to the principle of rewarding local inefficient practices; (2) no recognition of efficient management in some counties and possible inefficient management in others, and (3) the difference in unit costs resulting from density of population.

The transportation need of each county on the basis of a legitimate cost in that county seems to be the only common-sense basis of determining the distribution of state funds for transportation.

The need for transportation in any county may be determined by density of population. An urban community has relatively less need for transportation than a rural community. A densely populated rural county has relatively less need for transpor-



tation than a less densely populated county. If the rural population were distributed uniformly over the entire state, determining need on the basis of density of population would be an easy matter and the method used by Johns[1] in Alabama, Florida and other states could be applied. In New Mexico, however, there are thousands of acres that are unpopulated and hence have no transportation need at all.

A Suggested Technique

To remedy this defect in the Johns technique the relationship between occupied lands, such as farm and ranch lands, and the density of rural population should be used as a basis. Since only rural children are to be transported, we should devise a technique for measuring the relation of density of rural children on farm and ranch lands to the unit cost of transportation. It is proposed therefore:

1. That the state board of education assume the responsibility for administering, supervising and supporting the transportation of public school pupils.

2. That the state board of education adopt rules and regulations governing school bus equipment, drivers, routes, accounting, methods of contracting and payments for pupil transportation in the various counties and school districts of the state.

[1]Johns, R. L., State and Local Administration of School Transportation, Contribution 330, 1928. Bureau of Publications, Teachers College, Columbia University.

3. That a sufficient sum be set aside from the state public school equalization fund to finance school transportation on a state basis in accordance with provisions contained herein.

4. A formula has been devised and is herewith submitted for determining transportation need in the various counties. This formula is based on the relative density of rural children on the farm and ranch land of the state and the present average cost of transportation in counties of various densities. It is proposed that this technique be used until the experience of the state board of education indicates a more equitable method. The maximum state aid for transportation to any county for the fiscal year shall be determined by:

C times Y, when $\log Y = 1.4 - 1.4X$ and

C = The number of rural children from five to nineteen, inclusive, living in the county on farms or in villages of less than 1,000 population. (Basis, 1930 federal census.)

A = The number of acres of farm and ranch land in the county. (Basis, 1930 federal census.)

$X = \frac{100\,C}{A}$, or the density of children expressed in terms of rural children per hundred acres of farm land.

Y = The number of dollars of state transportation aid per rural child from five to nineteen years of age living on farms or in villages of less than 1,000 population; provided, however, that the minimum value of Y shall be $1 and the maximum value of Y shall be $20.

5. This formula is to be used to determine the maximum amount of state transportation aid per county. In no case, however, will the state allow a county more for transportation than that county is actually spending for that purpose. Counties should be permitted to supplement the state apportionment for transportation from district funds subject to the approval of the budgeting authorities. If a county, by reason of factors not included in the proposed technique, has a need in excess of that computed for other counties of like percentage of rural population, the state board of education should recognize this special circumstance in making an equitable distribution of state transportation funds. In order accurately to determine this need an adequate system of uniform accounting and reporting of all transportation expenditures will be necessary.

6. It will probably be necessary for the state board of education to provide special services in the state department of education for administering and supervising pupil transportation. Such services will cost only a small fraction of the financial saving to the state. It is estimated that a state director of transportation could save the state at least $50,000 a year and, at the same time,

STATE TRANSPORTATION PROGRAM

County	No. of Acres of Farm Land I	No. of Children 5 to 19 on Farms and in Villages of Less Than 1,000 Pop. II	Rural Children per 100 Acres of Farm Land III	Expenditures for Transportation in 1933-1934 IV	Amount Spent for Transportation per Rural Child V	Proposed Unit Cost VI	Potential State Program VII	Proposed State Aid VIII
Bernalillo	84,876	6,893	8.12	$ 4,890	$ 0.70	$ 1.00	$ 6,893	$ 4,890
Catron	648,805	1,086	.16	150	0.14	14.66	15,920	150
Chaves	2,314,115	2,947	.12	23,161	7.85	16.68	49,155	23,161
Colfax	1,926,848	4,865	.25	33,990	6.98	11.15	54,244	33,990
Curry	671,255	2,755	.41	32,017	11.62	6.70	18,458	18,458
De Baca	1,524,101	967	.06	12,425	12.84	20.00	19,483	12,425
Dona Ana	426,555	7,753	1.81	9,009	1.16	1.00	7,753	7,753
Eddy	1,532,318	3,901	.25	16,140	4.13	11.08	43,223	16,140
Grant	1,327,076	5,046	.38	31,102	6.16	7.38	37,239	31,102
Guadalupe	641,088	2,476	.38	11,152	4.50	7.38	18,272	11,152
Harding	960,891	1,552	.16	19,459	12.53	14.95	23,202	19,459
Hidalgo	753,947	1,183	.20	8,516	7.19	12.97	15,343	8,516
Lea	2,011,573	1,765	.08	33,706	19.09	18.98	33,499	33,499
Lincoln	1,316,403	2,722	.20	25,946	9.53	12.73	35,195	25,946
Luna	591,752	831	.14	11,299	13.59	16.00	13,296	11,299
McKinley	857,423	5,265	.61	5,965	1.13	3.52	18,532	5,965
Mora	917,409	3,614	.39	4,153	1.14	7.15	25,840	4,153
Otero	213,308	1,990	.93	11,876	5.96	1.25	2,487	11,876
Quay	1,647, 291	2,383	.14	45,637	19.15	15.79	37,627	37,627
Rio Arriba	722,305	7,762	1.07	504	0.06	1.00	9,702	504
Roosevelt	1,282,244	3,247	.25	52,201	16.07	11.11	36,074	36,074
Sandoval	238,128	3,852	1.61	4,201	1.09	1.00	3,852	3,852
San Juan	131,405	5,102	3.88	7,766	1.52	1.00	5,102	5,102
San Miguel	1,908,753	5,080	.26	9,187	1.80	10.87	55,219	9,187
Santa Fe	441,895	3,006	.68	11,232	3.73	2.81	8,446	8,446
Sierra	886,399	1,407	.15	2,836	2.01	1.00	1,407	1,407
Socorro	917,770	2,632	.28	8,285	3.14	10.19	26,820	8,285
Taos	147,247	5,223	3.54	1,125	0.21	1.00	5,223	1,125
Torrance	1,207,071	2,969	.24	40,575	13.66	11.40	33,846	33,846
Union	1,945,856	2,909	.14	49,713	17.08	15.54	45,205	45,205
Valencia	625,968	5,277	.84	16,638	3.15	1.68	8,865	8,865

increase the efficiency of transportation service in the various counties.

A chart on the opposite page shows the relation between the density of rural children and the cost of transportation per rural child. The base line, or X axis, represents the number of rural children per hundred acres of farm land in the county. "Rural children," as used here, means the children from five to nineteen years of age inclusive living on farms, ranches or in villages of less than 1,000 population, according to the 1930 federal census. The vertical line, or Y axis, represents the amount of money spent for transportation for each rural child in the county. Each spot represents the relationship of these two factors for an individual county, based on transportation expenditures in 1933-1934. For the lack of space, the chart does not show the three counties having the highest density of rural children on farm land.

The curve in the chart gives the most equitable basis for state apportionment for transportation. The equation of this line is: Logarithm of $Y = 1.4 - 1.4X$.

The line of transportation need per unit follows this equation between the values of $1 and $20 for Y. The amount of state aid due any county for transportation may be determined by applying the formula or by locating the point on the X axis corresponding to the density of that county, moving vertically to the unit-need line, then horizontally to the Y axis, then multiplying the corresponding Y value by the number of rural children in the county.

Column I shows the number of acres of farm and ranch land in each county, and Column II, the number of scholastics 5 to 19 inclusive, living thereon and in villages of less than 1,000 population as shown by the 1930 federal census. Column III contains the number of children per hundred acres and is obtained by dividing Column II by Column I and multiplying the quotient by 100. In Column IV is found the amount spent for transportation in 1933-1934 as shown by reports in the state department of education, and Column V is found by dividing Column IV by Column II. Column VI is found by locating density of each county (as shown in Column III hereof) on the X axis of the accompanying chart and the corresponding per pupil cost on the Y axis. Column VII is the product of Column II by Column VI. The potential state aid shown in Column VII will not be allowed, however, unless it was actually used for transportation. Column VIII, therefore, shows the actual amount that the state would allow the various counties on the basis of 1933-1934 expenditures.

What Price Fire Insurance!

By J. C. WERNER

ATTENTION was brought to bear upon expenditures for fire insurance in the school district of Coraopolis, Pa., through their fluctuation and consequent disturbing influence upon the annual budget. Prior to 1925 the total annual premiums paid were fairly constant. In 1925 a junior high school was erected at a cost of $225,000. During the same year an appraisal of existing buildings and equipment was made and additional insurance placed in accordance with the appraisal report. This made the total expenditure for 1925 practically three times as large as in previous years.

Because all policies had been written for three-year periods each third year created a budgetary problem. In an effort to overcome this condition and also to effect a saving in total cost all expiring policies were rewritten for a five-year term and so distributed as to have the annual insurance cost practically the same.

With the increasing cost of insurance the next problem was an analysis of premium costs and losses over a period of years. Accordingly the annual financial reports for the district, beginning with that of 1921, were studied. These reports show that during a thirteen-year period the premiums paid amounted to $17,439.40. The total amount of insurance in effect at the present time is $618,000. The same financial reports also show that during the same thirteen-year period the losses sustained amounted to $246.65.

This comparison naturally raised the questions, "Is this district's experience unusual?" and "What conditions prevail throughout the state?" In an attempt to secure information concerning conditions throughout Pennsylvania much difficulty was encountered. Insurance companies did not segregate school premiums and losses from other risks in the same classification. Continuous and reliable data were not available before 1924. In that year the annual financial reports required information concerning the amount of insurance carried, the total amount of premiums paid and the total losses sustained. On the basis of these reports the department of public instruction furnished the data shown in Table I.

TABLE I

Year	*Amount Carried*	*Premiums Paid*	*Losses Sustained*
1924	$150,339,297	$ 977,482	$549,000
1925	174,222,397	1,363,755	295,587
1926	169,061,000	1,085,549	474,000
1927	215,045,148	969,659	395,049
1928	240,010,186	1,086,437	177,729
1929	241,101,512	1,139,631	202,908
1930	234,987,950	972,159	322,764
1931	256,146,442	1,061,642	354,709
1932	265,127,387	954,066	145,276
1933	267,573,489	763,935	282,097
Ten-Year Average	$221,361,480.80	$1,037,431.50	$319,911.90

TABLE II

State	*Premiums Paid*	*Losses Sustained*	*Percentage of Loss*
Delaware	$ 25,406.12	$ 900.00	3.5
New Jersey	680,224.00	33,825.00	4.1
Maryland	84,612.90	14,585.88	17.2
Pennsylvania	1,037,431.50	319,911.90	30.8
Missouri	2,400,000.00	936,000.00	39.0
West Virginia	352,068.00	165,538.00	47.0
Texas	774,629.00	372,501.00	49.2
Virginia	189,687.24	145,924.89	77.0

The figures do not represent the whole insurance cost picture in Pennsylvania. Philadelphia began to carry its own insurance in 1913 with an appropriation of $162,500. Receipts in the insurance fund to Dec. 31, 1931, amounted to $3,689,824.01. The losses during the same period amounted to $409,512.84, and $2,608,299.00 from the fund was used to replace buildings. The balance in the fund Dec. 31, 1931, was $671,525.37. Had the insurance been carried with commercial companies the estimated premiums for the period would have been $1,250,000.

Pittsburgh began to carry its own insurance in 1927 with an appropriation of $465,172.50, and $180,000.00 has been appropriated since then. The losses since 1927 amounted to $7,226.87. Commercial premiums paid from 1922 to 1927 amounted to $212,688.36.

The experience of Philadelphia and Pittsburgh completes the insurance cost data for Pennsylvania, and while the ratio between premiums paid and losses sustained is not as large as for the thirteen-year period in my district it is sufficiently large to warrant the question, "Is Pennsylvania's experience different from that of other states

in which commercial insurance is employed?"

The data to answer this question were much harder to obtain in the case of other states. In some cases the data are for one year, in others for several years, and in one case for cities only. In order to make a comparison possible the losses were reduced to a percentage basis. In Table II the data obtained are set forth.

Table II shows Pennsylvania's relative position among the states from which data were secured. In New Jersey data from cities only were available. These were gathered by the National Association of Public School Business Officials and published in Bulletin No. 2*, a pamphlet that contains much interesting material concerning insurance problems.

Needless to say, the data presented here insofar as Pennsylvania is concerned, indicate that public school property is a good risk for insurance companies and that during the period from 1924 to 1933 inclusive approximately 69 per cent of the total premiums paid was retained by the various companies that carried public school fire insurance.

*Insurance Practices and Experience of City School Districts of the United States and Canada, Bulletin No. 2, National Association of Public School Business Officials. John S. Mount, Secretary, Trenton, N. J.

Modern Warfare on Roaches

By JOSEPH N. LAFERRIERE

KEROSENE, gasoline and the commercial cockroach and fly sprays are deadly insecticides that cause almost instant death to all insects. This knowledge is invaluable in every problem of insect control. To kill an insect "on the spot," do not look for a corrosive acid, but use these hydrocarbon oils. They have the physical and chemical properties that produce toxic action on insects; because of their lower surface tension they adhere to the skin, and by the law of capillarity penetrate at once through the breathing pores to the vital organs. The insects turn over, dead, and can be swept up. These sprays can be used whenever they can directly reach the insects. Their action is purely contacticidal.

A formula for a good roach spray that can also be used for bedbugs, ants, moth worms and other insects that can be reached directly calls for: kerosene, 40 per cent; carbon tetrachloride, 60 per cent, and about one ounce to a gallon of a cheap essential oil, like that of wintergreen. This mixture is noninflammable, nonstaining and evaporates without leaving a trace. It can be sprayed on almost anything except food. When a more rapid evaporation is desired because of the odor, the carbon may be used pure for it is just as toxic to the insects.

Certain facts should be considered in selecting roach powders. Borax is a seven-day killer. Insect powders (with rotenone or pyrethrum), though useful, are two-day killers. On plaster of Paris, flour and water, roaches have lived for thirty days with no apparent ill effects. Of all the powdered poisons that can safely be employed, sodium fluoride has been found the fastest and most toxic in its action.

The unusual and almost specific action of the fluoride comes from two causes. As a result of the cleaning-up habit of the insect, it passes its legs and feelers through its mouth parts and quickly absorbs a lethal dose; also enough of the fluoride is absorbed directly through the skin of the insect for toxicity, as Shafer (1918) and Hockenyos (1933) have proved in their investigations. The fluorides are now used extensively on beetles and other insects that have the same cleaning-up habit.

Sodium fluoride, acting both as a stomach and a contact poison, will kill every roach that is touched. It has a decisive advantage over insect powder and oil sprays in that it can remain for weeks in the insects' runs and poison every roach

The defects in our present methods of cockroach control come more from defective inspection than from the insecticides, according to Doctor Laferriere, consulting entomologist. This is true in the whole range of cockroach infestation. In this article, the author discusses remedies and tells the best ways to apply them in schools

that may pass through it. With sodium fluoride, death comes in from four to twelve hours, depending upon the amount of the dose received. The roach usually falls sick in a few minutes and then retires to its nest.

Sodium fluoride may be used pure, but it is just as effective when diluted with flour down to 20 per cent. The usual formula is 50 per cent fluoride and 50 per cent flour. Since the fluoride is poisonous to human beings, care must be taken that it not be confused with white substances used for food. Accidental poisoning has resulted from a mistake in the container, the fluoride being used for flour, baking powder or some other saline preparation. Therefore, in all institutions, sodium fluoride, when not in use, should be kept in locked or sealed containers, carrying large poison labels.

Sodium fluoride is safe enough for dusting purposes; no accidents have ever been reported after dusting. In any case, much less dusting is required with the newer methods.

Sodium fluoride costs about twenty cents a pound in ten-pound lots. This fluoride salt keeps indefinitely, like table salt, and has the same tendency to cake, though to a lesser degree. Consequently, it should be kept in a dry place. When dusted in dry places, it retains its toxicity for weeks.

Until recently, all attempts to destroy cockroaches with poisoned food proved unsatisfactory. The roach eats little, and is not conditioned on one food, as is the potato beetle. Furthermore, it is repelled by arsenic, and can detect any trace of this poison in its food.

Phosphorous paste is one of the few baits that roaches will eat; but its use is accompanied by a fire hazard, and at twenty-five cents for a two-ounce tube, it is too expensive for institutional use. Finally, since roaches are not strongly attracted to it, the kill is not always 100 per cent.

Insects Lured by Attractive Scent

The next step in cockroach control, then, is to find a poison that will not repel and a food that is highly attractive. Such a poison bait would solve most of the roach problems.

Research has recently shown that all insects are strongly attracted to certain odors that regulate their feeding, mating and ovipositing instincts. Certain odors will attract the gypsy moth from a distance of two or three miles. Perfumed baits are now used with great advantage against grasshoppers and many other insects.

Cole, in 1932, was the first to apply this principle to roaches. His instrument was an improvised Y-tube olfactometer, with which he tested the responses of 800 roaches to many of the essential oils. Banana oil, oil of sweet orange, oil of apple and oil of pineapple were found to be the best, every roach responding positively, which indicated the "extremely strong attractant properties of these oils."

With these powerful attractants, Cole made a poisoned "gelatine," which should be of great value. Here is the formula: gelatine (by weight) 6 grams; dilute beef broth (by volume) 200 cubic centimeters; mercuric chloride (U. S. P.) ½ gram, and approximately one drop of one of the four oils mentioned above.

The beef broth is essential as a food for the roaches; the gelatine to give a lasting consistency to the preparation; the essential oil to draw the insects, and the poison to preserve the mixture. The mercuric chloride or corrosive sublimate is poisonous, but no more dangerous than rat or roach paste. Pets will probably not touch it. It should always be handled with an old spoon or knife.

Poisoned Gelatine Is Effective

First, dissolve the gelatine in the hot tea broth, then add the mercuric chloride and the attractant. One drop of the essential oil is enough; the rest may be left in a stoppered bottle and will keep like any perfume. When the mixture has hardened, cut it — always with an old knife or spoon — into small cubes. These can be made in great quantities and will keep indefinitely in tin boxes. The poison is so strong that the roaches die in from two to four hours. Future tests may show that mercuric chloride may be replaced with sodium fluoride or sodium fluosilicate.

The most powerful toxicants are useless if thrown where there are no roaches, yet that is what usually happens in institutions. A little powder is dusted here and there, far from the nests, or where it can be easily avoided. When the roaches still remain, the blame is put upon the powder.

Dusting without first locating the nests is mere guesswork, like spraying at random in a forest to kill gypsy moths. It is a pure loss of time and material, as well as a messy and highly inefficient job. Of course, if the dusting is thorough enough, it will give a perfect clean-up but it is impossible, or at least impractical, to dust a whole building. Most of the labor is reduced by preliminary inspection. Defective inspection is the weakest point in the usual method of control.

One way to find all the nests is to use a flashlight in the dark. Roaches begin to come out in numbers almost as soon as it is evening and the lights are out. If there are any roaches at all, they are then in evidence. The flashlight does not disturb

their movements. This method has been almost unknown until now.

With the discoveries of sodium fluoride and perfumed bait, this flashlight method represents a great advance in cockroach control. Its necessity and advantages are as obvious as the method itself, for it reveals the exact amount of infestation and reduces the treatment to infested spots. It is a little inconvenient, but so easy that it can be done by a member of the building personnel.

The greatest difficulty would seem to be the vast area of buildings. The flashlight will reveal every roach in the place, and thus the treatment is restricted to infested spots, removing guesswork, worry and most of the labor.

Begin Inspection as Soon as It's Dark

The inspection can begin in the evening as soon as the lights are out. Roaches congregate as near as possible to their sources of warmth, food and shelter. They need darkness and especially privacy for their nests and show skill in choosing crevices where they will not be disturbed. Their nesting places are found by watching the young coming in and out of the cracks. The newly hatched brood seems to spend the first few nights of its life in the sink — that is why the little German roaches are called water bugs — and nest in the cracks near-by, but they soon find their way to other nests.

Roaches are gregarious and like to stay together — the larger species more so. Though active and accustomed to running all over the place, they usually retire to the nest. The young ones do not stray more than a few inches away. The female does not lay her eggs in the sink drain, as is often claimed, but in little pods that are dropped almost anywhere, and from these new colonies may be formed if they are near enough to water.

The first inspection should be as thorough as possible and all infestations noted. The basement should be examined as carefully as possible. The roaches there are usually of the larger species, and conspicuous. Inspect sewer traps, pipe tunnels and the furnace room. Moisture is not always a clue to their nests, but they will not live far from water or damp spots. The principle is the same for the rest of the building. Examine storerooms, pantries and sinks. Roaches may easily develop in classrooms, and feed on the remains of food. The examination is easy enough, for the roaches will appear, if there are any at all, as you go along.

Extermination may be done at the same time as the inspection. The operator will have to use his own judgment in the choice of remedies. In the basement, all the visible roaches may be killed at once with the cockroach liquid, or with pure carbon tetrachloride. Use an ordinary household spray which will leave one hand free for the flashlight. Then dust the infested cracks with powder, placing an even layer around the points of issue, so the insects may become caked as they pass through. Do not dust where there are no roaches.

In the rest of the building, it is often possible to spray the roaches that are running around. Spray lightly, until the insects are seen to fall, so there will be less odor. The dead insects are swept up at once and burned, to prevent eggs from hatching. The powder is dusted only in the infested spots. It may be applied with an ordinary blower of the compressed-air type, which costs about fifty cents in seed stores.

In dusting and spraying, the operator will learn with experience, and the flashlight will show the destruction of the insects, as well as the difficult problems that may arise. The job is finished only when all the roaches have disappeared.

The perfumed gelatine may eventually dispense with dusting and spraying, except in the basement. The principle is sound. The roach should be attracted to the bait, just as its cousin the grasshopper abandons its beloved grass for the sweetly scented bran. It is really the ideal method, but it will not work perfectly without preliminary inspection. The cubes of gelatine should be set out on pieces of paper or in half-opened match boxes, as near the nests as possible. The roaches eat so sparingly of it that their bites are scarcely visible. Remove the cubes in the morning and replace them every evening until the job is done.

With these remedies, most of the insects will be dead by the third day, even the little ones that may have hatched in the meantime. When infestations go into the walls, successive treatments with the spray will reach most of them, with the help of powder around the points of issue.

If the first treatments are thorough enough, the building will remain clean for many months, because the roach is a slow breeder. After that, a rapid inspection once a year should be sufficient.

Reduced Milk Prices for Pupils

The Chicago board of education recently entered into a contract with six dairy concerns for the purchase of milk and cream at reduced prices for fifty-two lunchrooms in high schools and branches. The arrangement is expected to effect savings at the rate of $20,000 a year. The price of milk sold to the children in half-pint bottles has been reduced from five cents to four cents. Last year 1,550,000 half-pint bottles of milk were sold in Chicago school lunchrooms.

Twelve School Lunchrooms and

By MARY FARNAM

CLEVELAND HEIGHTS has an approximate population of 55,000, with a total school enrollment of 9,332 pupils in twelve schools. There is one high school with an enrollment of 2,200, three junior high schools with enrollments ranging from 495 to 975 each, and eight elementary schools with enrollments from 375 to 769 each.

In the present set-up, the Cleveland Heights school cafeterias are divided geographically into four groups. Each group is composed of one high school and two elementary schools. A college graduate trained and experienced in home economics is manager of each group under the supervision of the director. These managers are graduates of Ohio State University, Ohio Wesleyan University, Margaret Morrison College and Mechanics Institute.

Under Home Economics Management

Under this plan the elementary schools receive expert home economics management, which otherwise would not be possible because of their small volume of business. The present policy is to furnish only the highest quality foods, prepared under sanitary conditions and served attractively, at the lowest possible prices.

In September, 1933, the compulsory rule for attendance in the cafeterias was removed. This resulted in a 28 per cent decrease in the total cash sales of the cafeteria department. Under the former management, during the school year 1932-1933, the cafeteria department operated at a loss of 4.2 per cent of the gross sales. Under the new system, during the two school years, 1933-1934 and 1934-1935, the cafeteria department made a surplus of 6 per cent of the gross sales in spite of the decrease in total volume of sales. In addition, the first year 1 per cent per month of the gross sales of each cafeteria was set aside to build up a depreciation fund. This year this amount was increased to 3 per cent in the high schools and 2 per cent in the larger elementary schools.

In the school year 1933-1934, 3,010 children were served as a daily average in the cafeterias. This was 32.2 per cent of the total school enrollment. This last year a daily average of 3,787 children were served, or 41.9 per cent of the total school enrollment. There has been a steady monthly increase in the daily average served since September, 1933. This increase in a year's time of more than 9 per cent shows that the food in the cafeterias is good and appeals to the children from kindergarten through the senior high school.

The present system is a simple yet effective one, each cafeteria being operated as a separate self-supporting unit completing the whole department, which is managed in a scientific business-like way like any successful restaurant.

The original equipment was furnished by the board of education, but this equipment must be maintained, improved, replaced or added to from the cafeteria department funds. All expenses including the salaries of the managers and the director are paid by the cafeteria department. The administrative expense is shared among all the schools in proportion to their receipts. Likewise the manager's salary is shared among the schools she supervises in a similar manner.

The following table shows these percentages. Schools 1, 4, 7 and 10 are high schools. The others are elementary schools.

PERCENTAGE TABLE SHOWING ADMINISTRATIVE AND MANAGER'S SALARY CHARGES

School	*Percentage of Total*	*Individual Percentage of Group*
Group I		
School 1	21.5	69.4
School 2	6.8	21.9
School 3	2.7	8.7
Group Total	31.0	100.0
Group II		
School 4	17.4	69.0
School 5	3.5	13.5
School 6	4.3	17.5
Group Total	25.2	100.0
Group III		
School 7	22.4	74.4
School 8	3.6	11.9
School 9	4.1	13.7
Group Total	30.1	100.0
Group IV		
School 10	7.2	52.5
School 11	3.5	25.7
School 12	3.0	21.8
Group Total	13.7	100.0
Grand Total	100.0	

How They Grew

Director Describes the Management of the Cleveland Heights Cafeterias

The following additional percentages are of interest. These are the actual percentages and the percentages as set up in the budget spent for various divisions of the expenditures.

Item	*Actual %*	*Estimated %*
Food	56.0—62.0	60.0
Total salaries	35.0—40.0	35.0
Kitchen salaries	18.0—25.0	20.0
General expense	1.3— 2.8	2.0
Depreciation	1.0— 3.0	2.0

The reason for the fluctuation is the great variance in daily volume of business. In the elementary schools particularly on a rainy, snowy or cold day the number served increases as much as 200 per cent.

All employees are interviewed and employed by the director of cafeterias and then assigned to the various cafeterias, where each employee becomes directly responsible to the manager of her group. A free physical examination is given each employee before entering the system and at periodic intervals afterward, although this is not required by either city or state law. A written schedule of work is given each employee to prevent misunderstanding and to promote harmonious working conditions. White uniforms are furnished to regular employees and white bib aprons to pupil employees.

There is one full-time employee for each 75 pupils served in the elementary schools and one employee for each 150 pupils in the high schools. The number of pupil employees varies from 4 in the smallest elementary school to 28 in the high schools. These pupil employees are selected by the manager from the pupils sent to her by the school principal.

CLEVELAND HEIGHTS SCHOOL CAFETERIA DEPARTMENT

To the Parent

.....has been recommended for assignment as helper in the..... school cafeteria. This type of work requires integrity and a sense of responsibility on the part of the student. As compensation for this service the student receives a .....c lunch.

If this duty meets with your approval, kindly sign your name on the line below.

.....Principal.

.....Parent.

Before beginning work, each pupil must return this permit slip signed by parent and principal.

Before beginning work, each pupil must return a permit slip signed by both the parent and the principal. Each pupil receives a 20-cent lunch and works about twenty minutes daily. In the elementary schools, one of the interesting pupil employee jobs is to assist small children by carrying the trays to the table, furnishing them with the proper silver, a napkin and a straw for the milk bottle. This helps promote courtesy among the children and also cuts down the breakage.

Pupil employees select their lunch from in front of the counter, just as any regular customer, and sign a check for it at the cashier's desk instead of paying cash. The regular employees may eat whatever they wish. However, a daily record of the items they eat and the counter cost of their food is kept. At the end of the month, after the food percentage for that month has been computed, it is simple to determine exactly the cost price of the employee's food.

Bids for supplies are sent out from the cafeteria office for ice cream, milk, butter, eggs, bread and paper goods. After these bids are checked, the successful firms are assigned to the cafeteria managers to service the cafeterias in her group. No salesman is permitted to call on a manager without an appointment. This rule saves a great amount of time.

Savings Come in Large Quantity Buying

Because of the great fluctuation in the quality and prices of meats, fresh fruits and vegetables, these items are not bought on bid but the firms are selected by the director and assigned to the managers. Canned goods are bought on future and delivered to each cafeteria when ordered out by the managers. Under this system the elementary schools have the advantage of low prices and high quality foods because of the volume of the whole department; this they could not enjoy if each school made individual purchases.

The manager makes out the menus for the following week for the schools in her group and sends them to the cafeteria office each Thursday. The director checks them on Friday and any suggestions or corrections are made before Monday.

Menus are changed daily in all schools and no item is repeated within two weeks' time except for the standard items such as milk, fruit juices and cookies. All menus are planned to be dietetically correct for the children of school age. No hamburgers, "hot dogs," pop, coffee or tea are served. No candy of any kind is served in the

elementary schools. No pastries, rich fried foods or rich desserts are served. All cookies are made in the cafeteria kitchens with the exception of graham crackers, which are popular with the smaller children. The elementary school menus are kept simple, yet aim to be well balanced with attractive combinations, so that even if a child ate all the items on the menu or any combination of items within reason, the menu would be well balanced.

No child is permitted to buy ice cream, cookies or simple dessert unless she has some hot dish or main dish on her tray also. A daily special is served in the elementary schools for from 12 to 15 cents, which is always from 1 to 4 cents less than the regular à la carte prices of the same items.

The high school menus are made up of a greater variety of items than are offered in the elementary schools. The schedule given below shows the present prices and size of portions. Free service of a napkin, tray and silverware are furnished to the children who bring their lunch from home.

The management of school cafeterias, especially in the elementary schools, offers a great educational opportunity to teach growing children the proper selection of balanced noonday meals. The training and experience of spending money to the best advantage are of great value to children of all ages. Even the smallest children in the elementary schools learn in a surprisingly short time that the daily special is the best value for the money and the best buy, even though they do not have the advice of their parents to rely upon, as is usually the case when children eat a meal away from home. After the first novelty of eating in the cafeteria has dimmed, these children choose

SCHEDULE OF PRICES AND PORTIONS

Items	*Size of Portion*	*Selling Price*
Tomato juice	4 oz.	$.03
Soup (2 crackers free)	8 oz.	.04*
Milk	½ pt.	.04
Chocolate milk	½ pt.	.05
Meat	4 oz.	.10
Meat combination	6 oz.	.08
Meat substitute	6 oz.	.06
Potatoes	No. 10 dipper	.05
Gravy	1 oz.	free
Vegetables	4 oz.	.05
Bread	2 slices	.01
Butter	1/48 lb.	.01
Salads	½ cup, head lettuce	.08
Salad dressing	self serve	free
Sandwiches	2 slices	.05
Cookies	3¼-in. diameter	.01
Ice cream	10 to qt.	.05
Ice cream bars	8 to qt.	.05
All desserts	4 oz.	.05
Pie (high schools only)	7 to 10¼-in. pie	.06
Cake	2½-in. square	.05

*In high schools, 5 cents.

R & N.

CLEVELAND HEIGHTS SCHOOL CAFETERIAS - STANDARD RECIPE

Number Servings 60 — Total Cost $2.26

Amount in one Serving 1 c — TOMATO BISQUE SOUP — 5 gal. — Cost per Serving .028

INGREDIENTS	AMOUNT	WEIGHT	UNIT COST	TOTAL COST	CALORIES
Tomato Puree #10	2 cans		.46	.92	
Sugar	½ c		.05/#	.01	
Soda	4 t.		.05/#	.002	
Onions		1 #	.032	.05	
Cloves	20			.02	
Parsley	1 bun.		.05	.05	
Bay Leaf	10			.01	
Stale bread crumbs	2 qts.		.14/loaf	.14	
Milk	5 gal.		.50	.80	
Butter		¾ #	.24	.18	
Salt	6 T.				
	Directions on back			2.262	

Standard recipes are furnished all the cooks.

lunches that either for economic or dietetic value would surpass the judgment of many an adult. Perhaps it is because there is a certain fascination, not found at home, about eating your vegetables because your best chum does, or drinking milk through a straw that makes it taste so much better.

The dining rooms of the cafeterias are separated from the serving rooms and are above average in attractiveness. Since all but one of the elementary cafeterias are on the first or second floor, lighting and ventilating facilities are sufficient. During the last two years curtains or draperies have been put up in all the cafeterias through the cooperation of some organization in each school. In several cafeterias, wall panels or murals have been painted on the walls by the children. In one school, each room made one wall mural and each child had some part in completing it. This helps stimulate the interest of the children in the school cafeteria. In another school the children made appliqué designs for the curtains and lamp shades.

Portable screens called "disposal screens" have been built in each cafeteria to screen the necessary cleaning-up activities from the children who are eating lunches at near-by tables. An opening at table height is cut in one panel of the screen and each child passes his tray through this opening instead of scraping and stacking the soiled dishes on his tray. The pupil employees behind this screen scrape, pile and sort the soiled dishes, milk bottles, silverware and trays as they are passed through the opening.

Standardized recipes are given all the cooks. Reliable scales, thermometers, standardized measuring cups and spoons, as well as temperature controlled ovens are used. The cooks are furnished butter, whole milk, fresh eggs and only the highest quality ingredients for these recipes. The managers cost price each recipe before it is used and the number and size of servings given. It is only good business, and just as easy, to know before

an item is served exactly what the cost and profit or loss will be. The foregoing procedure ensures daily standard products of uniform quality and size.

Standardized serving spoons and dippers are used at the steam table. No food is served the second day in its original form. For example, cake is made over into cookies or pudding. Thus each time an item is served it has lost none of its original flavor and freshness. Everything served is prepared in the cafeteria kitchens except bread, crackers and ice cream. All crackers and sandwiches, except the hot meat sandwiches, are wrapped in waxed paper or placed in glazed paper sacks. One slice of graham bread and one slice of white bread are used in making a sandwich. The bread is cut diagonally across and one section reversed before it is wrapped. This simple idea has increased the sale of sandwiches to a marked degree.

The cafeteria director visits a different cafeteria at lunch time each school day to see that standards are maintained and to make any suggestions. In this way it is possible to keep in intimate touch with all the cafeterias.

The manager keeps a perpetual inventory of everything bought and used each day in each cafeteria in her group. The cash value is figured at the end of each month for the operating report. This provides an accurate check of each item and cuts down losses and leaks.

Each elementary school head cook telephones

CLEVELAND HEIGHTS SCHOOL CAFETERIA DEPARTMENT — Page 1

WEEKLY-MONTHLY STOCK SHEET

School _____ Valuation Food $ _____

Month Ending _____ Valuation Misc. & Cl. Sup. _____

Total $ _____

ITEM	Unit Cost	Balance	Total Amount Received Weekly				Total Amount Used Weekly				Balance	Cash Value
			1	2	3	4	1	2	3	4		
BREAD AND ROLLS BREAD—White												
Brown												
Rye												
ROLLS—Whole Wheat												
Sandwich Buns												
Sandwich Buns												
COOKIES												
CRACKERS—Salt												
Graham												
ICE CREAM SAND. WAFERS												
PRETZELS												
DAIRY PRODUCTS BUTTER												
EGGS												
CHEESE—Cream												
Cottage												
York State												

A perpetual inventory is kept of everything bought and used each day. The cash value is figured at the end of each month for the operating report.

CLEVELAND HEIGHTS SCHOOL
CAFETERIA DEPARTMENT
DAILY SERVICE RECORD

_____Month School_____

Date	Weather	Bell-faire	Indigent No.	Indigent Amt.	Employees No.	Employees Amt.	Pupils and Teachers No.	Pupils and Teachers Amt.	No. Served	Misc. Re-ceipts	Lunch Re-ceipts

The daily service record shows the date, weather, number and amount of lunches served to employees, pupil and teacher employees, number of cash lunches served, any miscellaneous receipts and the lunch receipts for each day.

her manager each day after lunch to give her orders for the following day, report the day's volume of business, and discuss any changes in menu that may be necessary in order to use left-overs. The head cook in the elementary schools keeps a daily order book in which is recorded all supplies ordered from her manager daily. Each item is checked off upon receipt. Any item used from the storeroom is also recorded in the order book. In addition, "a daily counter sheet" records the number of servings prepared of each item on the menu, the number served and the number left over. This last record is entered as "previous left-overs" to begin the next day's report.

Have Pupil Checkers and Adult Cashiers

The daily service record shows the date, the weather, the number and amount of the lunches served to the indigent children, the number and amount of lunches served to the employees, pupil and teacher employees, the number of cash lunches served, any miscellaneous receipts, and the lunch receipts for each day. In each cafeteria there is a pupil checker and an adult cashier for each line of service.

In the elementary schools, where the volume of business does not warrant the investment of an expensive checking machine such as is used in the high school, a "daily sales report" is used to record the amount of each sale. The cashier says aloud the amount of the sale and the pupil checker records each sale in a separate space.

At the end of each day the head cook of the elementary school records at the top of this sheet the number of pupils served and the actual amount of cash taken in. These reports are then sent to the cafeteria office, where a third person counts the number served and checks on an adding machine the total of the sales recorded on each sheet. The director checks these sheets each week and it is immediately apparent if any intentional or unintentional error is being made at any school. Since the person who makes the records does not finish them, or make the final check, it is almost impossible to alter or "fix" the records.

The cash receipts are collected each Friday by an employee of the board of education. A duplicate deposit slip is given each cafeteria manager. These receipts are recounted at the board of education business office and an official receipt is sent to the cafeteria office. These are checked against the deposit slips given the cafeteria managers. The receipts are then deposited in the cafeteria fund of the board of education bank account. Payrolls are sent to the board of education from the cafeteria office each week for issuance of payroll checks by the board from the cafeteria fund.

Each school has a certain amount of petty cash to use for emergency purchases. These purchases are recorded in a petty cash book and a written receipt is required for each purchase. These books are sent into the cafeteria office at the end of each month to be checked, and the amount of money spent is then replaced for use the following month.

Any overtime is paid for at the regular hourly rate from the petty cash, and a receipt showing the person paid, number of hours worked, the rate and total amount paid is signed by both the person receiving the money and the person paying out the money.

The invoices for the purchases of each cafeteria are sent to the cafeteria office each Friday after they have been checked and approved by the managers. These are entered into the office records and the cafeteria bills vouchered and sent to the board of education business office for payment from the cafeteria fund. All bills are paid twice a month in order to benefit by any possible discounts.

Monthly Report to Board of Education

At the end of every month a complete operating report for each school cafeteria and the cafeteria department as a whole is compiled and sent to the board of education for approval. The report shows the receipts, food cost, total salaries, kitchen, managers' and administrative salaries, general expense, depreciation reserve, and the profit or loss for the current month. Beside each cost figure appears the percentage figure for that cost. Mere

MONTHLY OPERATING REPORT FOR EACH OF TWELVE CAFETERIAS

	Receipts	%	Food Cost	%	Total Salaries	%	Kitchen Salaries	%	Mgrs. Salaries	%	Adm. Salaries	%	Gen. Exp.	%	Replace	%	P. & L.	%	Av. Check
H. S.	$1,680.61	22.9	$926.30	55.1	$538.82	32.0	$322.07	19.2	$ 77.50	4.6	$139.25	8.2	$ 16.98	1.01	$ 50.41	3.0	$148.10	8.8	.10
Tay.	474.33	6.4	274.78	57.9	134.62	30.4	90.10	19.0	22.00	4.6	22.57	4.7	2.90	0.6	9.48	2.0	52.50	11.0	.15
Cnt.	199.96	2.7	125.77	62.8	65.14	32.5	49.98	24.0	8.00	4.0	7.16	3.5	2.47	1.2	1.99	1.0	4.59	2.2	.13
Rx. J.	1,290.85	17.6	717.61	55.5	420.28	32.6	243.60	18.8	63.00	4.8	113.68	8.8	17.21	1.3	38.72	3.0	97.03	7.4	.09
Rx. L.	268.22	3.6	157.48	58.7	80.64	30.0	54.04	20.1	12.60	4.6	14.00	5.2	2.48	0.9	2.68	1.0	24.94	9.2	.08
Frfx.	299.40	4.08	183.47	61.2	88.53	29.6	59.25	19.7	14.40	4.8	14.88	4.9	2.48	0.8	2.99	1.0	21.93	7.3	.09
Rox.	1,606.23	21.9	953.54	59.3	485.61	30.2	297.37	18.5	65.72	4.0	122.52	7.6	19.62	1.2	48.18	3.0	99.28	6.1	.09
Blvd.	275.30	3.7	179.15	65.07	83.17	30.1	59.25	21.4	11.68	4.2	12.24	4.4	2.75	0.9	2.75	1.0	7.48	2.7	.12
Cov.	276.92	3.7	160.81	57.7	102.26	36.9	76.58	28.0	12.60	4.5	13.08	4.7	4.85	1.7	2.76	1.0	6.24	2.2	.12
Mont.	485.71	6.6	274.58	56.1	174.12	35.8	91.54	18.8	42.50	8.7	40.08	8.2	7.16	1.4	4.85	1.0	25.00	5.1	.08
Nob.	236.15	3.2	113.40	48.0	89.98	38.1	54.30	22.9	20.80	8.8	14.88	6.3	3.16	1.3	2.36	1.0	27.25	11.5	.09
Oxf.	211.92	2.9	111.72	52.7	72.46	34.2	39.60	18.6	19.20	9.6	13.66	6.4	2.90	1.3	2.11	1.0	22.73	10.7	.09
Total	$7,305.60	100.0	$4,178.61	57.1	$2,335.68	31.9	$1,437.68	19.6	$370.00	5.06	$528.00	7.2	$84.96	1.1	$169.28	2.3	$537.07	7.3	.09

May, 1935: Days' receipts, 22; days' wages, 22; labor per day, $65.34; average check, $0.09, and number served, 76,122.

At the end of every month a complete operating report for each school cafeteria and the cafeteria department as a whole is compiled and sent to the board of education for approval.

figures are misleading but when placed beside its percentage figure it is simple to make the correct comparison of the various monthly costs and expenditures.

In addition, the monthly report shows the cumulative receipts, food costs, gross profit, total expense and profit and loss for each cafeteria and the department as a whole. Other interesting figures included are the total number served, average check and the number of days' receipts. The number of days wages were paid is also given because, owing to school holidays, in some months, the number of days wages are paid is greater than the number of days receipts are received.

Semi-Annual Inventories Taken

Physical inventory is taken twice a year. Space is provided to show the loss since the last inventory and the amount needed for the next semester. The unit price and the total price of each item are recorded. This record is taken by groups, *i.e.* aluminum ware, china, glassware. The amount of yearly depreciation is a composite total of the percentages of each group based on the actual investment and the expected years of service.

For example, in the high school the total investment in aluminum ware is $826. The number of years of expected service is ten. There are ten school months in a year, therefore, 1 per cent per month of that total investment must be written off each month, or $8.26. This system builds up a reserve fund from which replacements can always be made.

All equipment is purchased by bid by the cafeteria director. Constant effort is made to keep all the equipment in good condition, since it is poor business practice to neglect expensive equipment when periodic checking, oiling and repair will prolong its life. Chipped or cracked china and glassware are discarded immediately because they are both insanitary and unsightly.

The surplus accumulated since the beginning of the new system has been turned back into the cafeterias as rapidly as possible in three ways: (1) to lower costs of food and increase the size of the portions; (2) to increase employees' salaries from 4 per cent to 12.5 per cent a year with a monthly bonus during the peak winter months, and (3) for replacement of old equipment and purchase of new.

In replacing equipment, white enamel ware service counter dishes and cooking utensils were replaced with the best quality aluminum ware or stainless steel. Glasses for fruit and tomato juice were purchased. As a result, the sale of fruit and tomato juice has increased monthly until they are runners up to milk in the volume of sales. The purchase and use of green glass salad plates and individual ring molds increased the sale of salads as much as 100 per cent in some schools. Individual casseroles changed "stew" into fast selling meat pie.

Number Served Increases Each Month

Screens have been purchased for all the windows in the dining rooms, serving rooms and kitchens. "Disposal screens" built into the dining rooms improve the appearance of the room and cut down breakage. Special checking machines were bought that cut down loss and error and leave no room for dishonesty. Additional chairs were purchased for several dining rooms.

The present Cleveland Heights cafeteria department, under the direction of a home economics trained director with home economics trained managers as assistants, is entirely self-supporting, each school cafeteria operating as a self-supporting unit of the whole, and furnishes well cooked, wholesome food to the children of Cleveland Heights at moderate prices, served in attractive surroundings. The daily average number served increases each month.

Special Menus for Christmas

By Mrs. JOHN S. ROGERS

MENU No. 1

Special Plate (20c)	Roast pork and apple sauce Creamed potatoes Coleslaw with pimientos 2 slices whole wheat bread and butter ½ pt. milk Gelatine dessert
Soup	Cream of tomato
Meat or Fish	Roast pork and apple sauce
Meat substitute	Corn pudding with peppers and pimientos
Potatoes	Creamed potatoes with parsley
Vegetables	Escalloped or baked stuffed tomatoes Buttered cabbage
Salads	Cranberry salad Waldorf, garnished with red or green cherry Cheese balls rolled in parsley Candle salad
Sandwiches	Jam Chopped ham
Desserts	Ice cream slice with Christmas tree center Red and green gelatine Pineapple delicious, red cherry garnish White layer cake, with light green or pink icing Cottage pudding, cherry sauce

MENU No. 2

Special Plate (20c)	Baked ham Escalloped potatoes Green beans Bread and butter Milk 1 slice pineapple (colored green)
Soup	Cream of spinach
Meat or Fish	Baked ham Spiced pineapple
Meat substitute	Spaghetti and tomato
Potatoes	Escalloped potatoes
Vegetables	Green beans Spanish corn
Salads	Pear and cheese ball rolled in parsley Molded lime salad, or tomato aspic Cinnamon apple salad
Sandwiches	Strawberry jam and cream cheese Tomato and lettuce
Desserts	Ice cream in individual molds Red and green gelatine cubes Maraschino cherry pudding Cup cakes frosted with icing in Christmas colors Strawberry chiffon pie

MENU No. 3

Special Plate (20c)	Creamed chicken on biscuit Cranberry jelly Mashed potatoes Peas ½ pint of milk Christmas cookies
Soup	Tomato bisque
Meat or Fish	Creamed chicken and biscuit Cranberry jelly
Meat substitute	Italian noodles with olives
Potatoes	Mashed Baked stuffed, paprika garnish
Vegetables	Peas Cauliflower Grilled tomatoes
Salads	Molded red cherry Pineapple cabbage marshmallow, green cherry garnish Cottage cheese, paprika garnish
Sandwiches	Sliced ham Pimiento cheese
Desserts	Ice cream slice with Christmas bell center Red gelatine Green gelatine Cornstarch mold, cherry sauce Snow balls, with small red candles Mince pie Christmas cookies, colored sugar Steamed plum pudding

Santa Claus in School Cafeteria

By Anne P. O'Brien

Each year we strive for a special holiday feature in our school cafeterias in Atlantic City, N. J. Last year our Christmas decorations included one or more trees on which lights as well as balls and tinsel were used. In one cafeteria, which because of its location must always be artificially lighted, red and white fringed paper shades were used in place of the usual glass shades. Santa Claus was on hand in every cafeteria on December 20 and distributed hard candy to each pupil free of charge. On this day a special luncheon plate was also served comprising turkey cutlet, cranberry jelly, mashed potatoes and creamed peas for which 15 cents was charged.

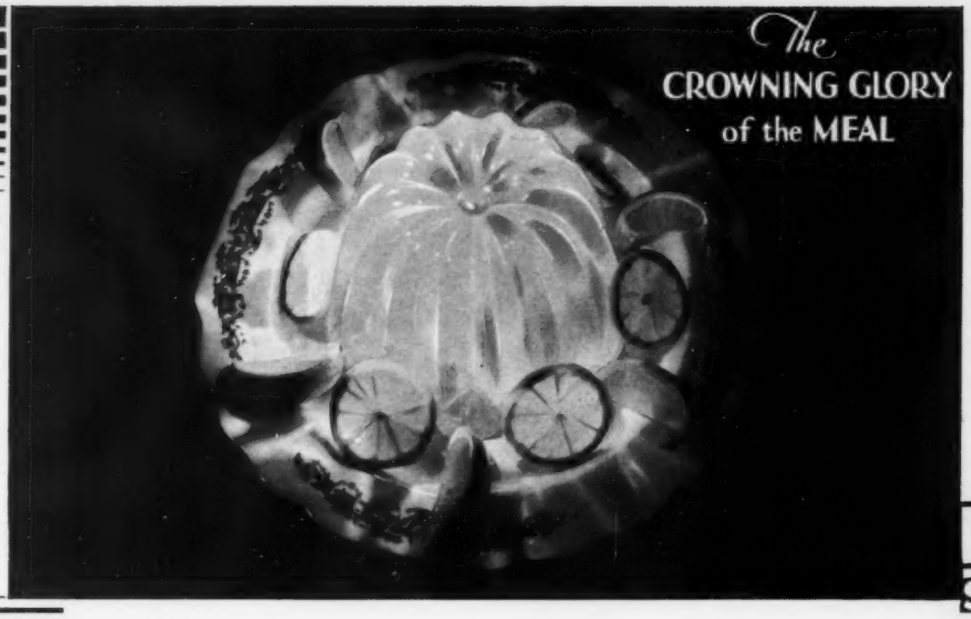
Each year some special Christmas treat for the prevocational group is planned. A luncheon or a supper is served to about ninety. Last year's menu was as follows:

Turkey cutlet
Cranberry jelly
Mashed potatoes Buttered peas
Rolls Butter
Christmas ice cream
Layer cake

The tables were set up with paper tablecloths, silver, rolls, butter and glasses of water. Hot plates for the main course were served, cafeteria style.

This holiday supper or luncheon for the prevocational group is a philanthropic move on the part of the teachers of this department. It was through the efforts of the head teachers that the interest of the local trades people was aroused with a result that, with the exception of the turkeys, most of the materials used were donated.

The ice cream was a special brick featured by the dealer during the Christmas season — a vanilla brick with a red bell stencil. A committee of pupils served the guests of honor. Other pupil committees decorated the tables, seated the guests and furnished the entertainment.



Renewed Energy for the

P. M. SESSION

Without the Dullness that Follows Heavy Foods

THE noon meal is the school child's most important one. It must be balanced to supply energy for the second session but light enough to avoid afternoon dullness.

Knox Sparkling Gelatine is the perfect touch to top off the school luncheon. It adds to the supply of proteins with a minimum of sugar. Sweet but not cloying. Dainty but zestful. Put it on the cafeteria dessert counter and watch the children "go for it."

Make sure it's Knox Sparkling Gelatine because only Knox can offer you a gelatine of such uniformly high standards. Knox Sparkling Gelatine may be had in institutional packages of larger size which proportionately reduce the cost.

You may also now obtain KNOX JELL—a ready-to-set jell with pure flavor added. A quality product in 26 oz. tins and 3¼ oz. packages. Takes only five minutes to make.

KNOX SPARKLING GELATINE

KNOX GELATINE LABORATORIES, 467 Knox Ave., Johnstown, N. Y.

Please send me FREE brochures on Food Economy and Diets using Knox Sparkling Gelatine.

Name .....

Address .....

City ..... *State* .....

KNOX SCIENTIFIC FACTS

Knox Gelatine is prepared under scientific control throughout and takes six weeks to make.

•

Even the drying air is filtered . . . untouched by human hands.

•

Analysis
Knox Gelatine

Protein (14 amino acids)	85.0 — 86.0%
Calcium Phosphate	1.0—1.25%
Fat (less than)	0.1%
Moisture	13.0—14.0%
Carbohydrate	Nil

•

Bacteriologically safe . . . pH almost neutral . . . odorless. Carbohydrate-free . . . exceeds in quality all U. S. P. standards.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

NEWS IN REVIEW • • • •

Schoolhouse Construction Council Votes to Retain Independence; Determines Other Policies

Significant adoptions of policy were made at the thirteenth annual meeting of the National Council on Schoolhouse Construction which met for the second consecutive time in Washington, D. C., November 4 to 8.

The council definitely determined to remain an independent body, acting both as a clearing house between states for school plant ideas and practice and also as a research group in this highly specialized field. It continued its policy of close cooperation with the federal Office of Education and also approved a possible working agreement with the American Council on Education.

W. G. Eckles of Jackson, Miss., was elected president, and T. C. Holy, Ohio State University, was chosen vice president. Ray L. Hamon, Peabody College, was reelected secretary-treasurer. W. L. Credle, Raleigh, N. C., was chosen for a three-year term as member of the executive committee.

Walter N. Polakov, author of "The Power Age," spoke at the annual banquet on "The Significance of Recent Technological Changes for Education," stressing the values of general education as opposed to the specifically vocational types.

Many interesting papers on various aspects of building research problems were presented during the four days of meeting, among which were included the following:

"Modern European School Buildings," E. T. Peterson, University of Iowa; "Acoustical Experiment in the Classroom," I. T. Catherine, board of education, Philadelphia; "Progress of Schoolhouse Construction and School Plant Rehabilitation and Beautification During 1934-35," S. L. Smith, Julius Rosenwald Fund; "Improving the School Plant," J. F. Horn, state department of education, Texas; "Types of Construction Materials as Relating to Original Cost, Maintenance and Operation of School Buildings," F. R. Scherer, board of education, Rochester, N. Y..

"The Need of State Supervision of Schoolhouse Construction," J. H. Hixson, state department of education, New York; "An Outline of an Inexpensive State School-Plant Survey," R. V. Long, state department of education, Virginia; "Needed Research in the School Building Field," T. C. Holy, Ohio State University; "School Plant Surveys," W. G. Eckles, state department of education, Mississippi; "A Technique in Determining Natural Communities," Arthur B. Moehlman, University of Michigan; "Room Utilization in High School Buildings," T. J. Higgins, board of education, Chicago; "Relative Merits of Classroom Wardrobes and Wardrobe Rooms," A. G. Corbin, board of education, Yonkers, N. Y.; "The Development of Indices for Determination of School Building Needs," F. R. Noffsinger, Indiana University, and "School Building Costs in Missouri," N. E. Viles, state department of education, Missouri.

Preschool Dental Health Week

Every preschool child in Greater New York whose parents took advantage of the offer was given a free examination during the week of November 11 to 16 through the organized dental profession. Teachers helped in the campaign by telling pupils to urge their parents to take little brothers and sisters to a dentist.

New Volumes for Brown Library

Additions to the John Hay Library at Brown University, Providence, R. I., during the past year totaled 21,657 items. This represents the largest addition since 1930-1931 and brings the total resources of the library to 481,150 volumes and 520,641 for all items. Of the additions, nearly 10,000 books and other items were by gift, the largest being the library of the late Prof. Wilfred H. Munro.

Wheaton College Has Greenhouse

Among recent improvements made to the plant of Wheaton College, Wheaton, Ill., is a new greenhouse for the use of the biology department, and more particularly, the botany classes. This building is large enough to serve both the college and the academy, and furnishes a place for terrariums and aquariums, as well as a place for flowers, a cactus garden and other plants of various kinds. Advanced students do original experiments in the greenhouse laboratory.

Individual Tests Urged for College Entrance

The practice of using cumulative records and individual tests as the bases for college entrance was advocated at a meeting of 300 college admissions officers, school superintendents, head masters and guidance counselors held in New York City.

The gathering was sponsored by the joint auspices of units of the American Council on Education, the Progressive Education Association, the Cooperative Test Service and the Educational Records Bureau. The other side of the question was advanced by certain speakers who held to the belief that entrance examinations, despite abuses, have real value and in some cases should have wider use in determining individual capacities.

Among the speakers on the program were Dr. George F. Zook, president of the American Council on Education and former United States Commissioner of Education; Dr. Claude M. Fuess, head master of Phillips Academy, Andover, Mass.; Dr. Walter A. Jessup, president of the Carnegie Foundation for the Advancement of Teaching; Prof. I. L. Kandel of the International Institute of Teachers College, Columbia University, and Dean Virginia C. Gildersleeve of Barnard College.

Rollins College Has 50th Birthday

More than 150 colleges and universities were represented at ceremonies attending the fiftieth anniversary of the founding of Rollins College at Winter Park, Fla. Educational organizations and societies also had representatives present. The program featuring the semi-centennial observance included an academic procession and convocation, a luncheon in honor of charter students, the unveiling of commemorative tablets marking significant sites relating to the first days of the college, and a dinner for fall homecoming alumni. Assisting in the program was Dr. Arthur S. Gale, dean of the University of Rochester, whose father, the Rev. S. F. Gale, was a charter trustee of Rollins and who gave one of the addresses at the official opening of Rollins fifty years ago.

College Incomes Show Rise

A study of 300 colleges and universities reveals that the income accruing from their activities will be 6 per cent higher this year than last, according to Henry G. Badger, statistician of the federal Office of Education. Most of the funds, it is shown, will come from public sources. Ninety per cent of the colleges surveyed met their payrolls in full last year, compared with 82% in 1933-34.

Westfield School Board selects **Sealex Linoleum for another school unit**

Five years ago Sealex Linoleum Floors were installed throughout Westfield, New Jersey's handsome Benjamin Franklin School shown above. Westfield's School Board chose Sealex because it provides quiet and comfort underfoot and ease of maintenance possible with no other type of flooring.

So well are these Sealex Floors meeting every school requirement that the Westfield School Board now states "there is no other floor as satisfactory for corridors and classrooms . . ." And the Board further expresses its complete satisfaction by a flat specification of Sealex Linoleum for the new Woodrow Wilson School at Westfield.

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PRIVATE SCHOOLS • • • •

Phillips Exeter Plant Changes Now Completed

The second largest enrollment in its more than 150 years' history is recorded by Phillips Exeter Academy, Exeter, N. H., with a total of 706 students. Completion and occupancy of Bancroft Hall this fall has brought to an end the physical expansion of the school plant made possible by the gifts of Edward S. Harkness of New York City.

The Harkness Plan, which was carried out during five years, comprised the building of four dormitories and dining halls, one recitation building and the remodeling of the remaining dormitories and recitation building.

Several changes were made in the curriculum of the school this fall. A course in fine arts has been instituted with sixty boys enrolled. It has also been decided to institute an elementary course in biology beginning next year with a more advanced course proposed for the year following.

Cleveland's University School Makes Changes

The serviceability of its library has been increased considerably in the University School, Shaker Heights, Cleveland, Ohio, by rearranging the shelving, thus providing additional space for books with better light and more room for the reading tables.

Several changes have been made in the curriculum this year. For the first time since the war, a two-year course in German is provided. College algebra has been added for boys preparing for engineering schools. The work of these pupils is carried on in the completely equipped machine shop and drafting room.

Private School Athletic Competition Is Revised

The Athletic Association of Private Schools, of which Frank S. Hackett, head master of the Riverdale Country School, Riverdale, N. Y., is president, is investigating methods of promoting the amateur spirit in school athletics. Herbert W. Smith, head master of Fieldston School, is chairman of the investigating committee.

Methods of competition in athletics are being revised, according to Mr. Hackett. Schools with high school divisions are being graded into athletic classes on the basis of the number of boys in each division. Younger boys are being graded under the coefficient plan, which considers height and weight as well as age.

The association, of which thirty-four schools are members, is cooperating with 100 preparatory schools in New York and New England in a study of sports publicity. The study will deal with the effect on schools and individuals of the tendency to exploit athletic stars.

Four-Year-Olds Have Own Building at Friends School

A unique building has been added to the plant of the Germantown Friends School, Germantown, Pa. Last summer there was erected adjoining the kindergarten a new building to provide for four-year-olds. This contains a large sunny room, independent heating plant and generous cupboard spaces. A sun deck covers the entire building and is adequately furnished for outdoor play in the sun.

Two types of equipment have been provided. Indoors are materials which may be used by the child without adult help as well as books, phonograph, cots for resting, housekeeping equipment for play and nature material. Outdoors on the sun deck are large hollow blocks for building, saw horses, long boards, wagon and bicycles, ladders and other items that require lifting, dragging, pedaling, pulling and climbing.

The four-year-olds' school is appealing to the parents of the community and has already enrolled its capacity.

New Courses at Ferry Hall

Ferry Hall, girls' school at Lake Forest, Ill., began its sixty-seventh year with a curriculum considerably enlarged and with increased enrollment in both the high school and junior college divisions, it is reported by Eloise R. Tremain, principal. The school's department of household economics, closed for two years, has been reorganized to offer courses in foods, clothing and interior decoration. Dramatic arts, science and secretarial courses are also included.

De Veaux Library Adds Volumes

Almost 3,000 volumes are now included in the library at De Veaux School, Niagara Falls, N. Y. In order to stimulate school reading the library is open for longer periods this year. In addition to a half hour after lunch for the convenience of day pupils, two extra hours on Wednesdays and four hours on Sundays are given.

Income From Tuition Is Much Larger This Year

The increase in tuition income to private schools will be over $2,250,000 this year, according to N. W. Ayer and Son, which reports larger enrollments than a year ago in 86 per cent of 202 schools studied.

The reports show that junior colleges have the largest relative increase of any type of school, although the increase in the attendance at military schools is notable.

The schools in New England tie with those from the South in showing the largest increase in attendance this fall compared with a year ago. Schools in the Middle West show the least gain as a sectional group. Last year the Southern schools were at the head of the list in enrollment increase compared with the previous year. This top place in two successive years reflects the better business conditions in that part of the country, according to those who have studied the subject.

Classification System Is an Aid in Deportment

Standards of deportment in the Asheville School, Asheville, N. C., have been considerably improved, according to Dr. Howard Bement, head master, since the introduction of the classification system. This is based on rewarding a boy for his achievements rather than giving demerits when he has violated school regulations.

At the end of each three-week period, the pupil receives a classification ranging from "A" to "E." Those having an "A" classification receive privileges comparable to college undergraduates. A lower classification automatically reduces the number of privileges allowed. Thus, the pupil who receives an "E" is under constant supervision for the ensuing three weeks.

The pupil's classification is based on the number of points he receives out of a possible total of 100, that is, he is graded on scholarship, deportment, effort and general attitude. Should he receive poor grades, yet be conscientious in his endeavors, he receives points for the effort made.

Kemper Unveils Will Rogers Plaque

A memorial service for Will Rogers was held at Kemper Military School, Boonville, Mo., on Sunday, Nov. 3. At that time a bronze plaque was unveiled and dedicated to the memory of the humorist. The inscription is as follows: "In Memoriam, Will Rogers, Humorist, Actor, Philosopher, Kemper Cadet 1896-98." Following the services the usual Sunday parade was held. At dinner several members of the classes of 1896-98 were guests of the school.

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REGIONAL NEWS • • • • •

Eastern States

NEW JERSEY

Atlantic City.—A study of "Behavior Problems in Secondary Schools" has been published by the New Jersey Secondary School Teachers' Association, under the leadership of Charles H. Beek of Summit, N. J. It was prepared by a committee selected by Lois Meredith, president of the mental hygiene association of the New Jersey State Teachers' Association. The content of the pamphlet was discussed at the annual convention of the New Jersey State Teachers' Association held here November 8 to 11. Since the pamphlet was prepared, Bertha Lawrence of Trenton, has succeeded Mr. Beek as head of the Secondary School Association.

Hackensack.—Manual training shop, sewing room, lunchroom and kitchen will move up from the basement of Leonia High School, the Leonia voters have declared emphatically. By the largest vote ever polled in a local school election, modernization of the high school was approved. Lawrence Licht, architect of Englewood, N. J., is drawing plans for the project, which will cost $300,000.

Mount Holly.—The site has been selected for the new Rancocas Valley Regional High School. It will be erected on Miller's Hill in Mount Holly, it is announced by R. C. B. Parker, supervising principal.

Paterson.—Work is expected to start shortly on a new public school here to take the place of Public School No. 18, which is obsolete. The structure, which will cost $600,000, will be a WPA project, the federal government having agreed to pay 45 per cent.

NEW YORK

Tarrytown.—The name of the Washington Irving Elementary School has been changed to the Frank R. Pierson School, in recognition of the more than forty years of service of the president of the board of education. Tarrytown has a Washington Irving High School.

Gloversville.—No evidence of negligence or vandalism on the part of any person in charge was found following the board of education's investigation of the crash of a section of bleachers at Darling Field here in which thirty-two persons were injured. The bleachers fell, according to the investigating committee, because they were carrying an unusual load at the time.

MASSACHUSETTS

Fitchburg.—The new Fitchburg High School, to replace the old building destroyed by fire, is to be of red brick with green slate roof, cornices of copper painted, wooden double-hung windows and granite pediments and doorways. Granite was chosen especially in view of the facilities at Fitchburg for quarrying and cutting granite. The cupola will be of wood. Architects are Coolidge, Shepley, Bulfinch and Abbott of Boston, with Albert F. Francis of Fitchburg as associate architect. The building will cost $900,000.

PENNSYLVANIA

Ashland.—Men are clearing a sixteen-acre site near Millersville for the new Butler Township High School. The financial condition of the school district is said to be so good that it was not necessary to submit to the voters the question of increasing the indebtedness. A bond issue of $74,000 is being sold locally. PWA funds will help finance the project.

Connellsville.—Crawford School held its annual fair in the early autumn, the exhibits being the vegetables and flowers grown by the pupils during the summer.

Harrisburg.—Seventy one-teacher schools were closed through consolidations last year in this state. More than 6,000 schools still fall in the one-teacher category.

Philadelphia.—An eye clinic for public school children has been opened at which those who cannot afford examinations and glasses are provided for. The board of education has set aside $15,000 for this work . . . A Jewish burial ground, almost 100 years old, is among a solid block of properties whose purchase has been authorized by the board of education as the site of a new elementary school. The board will pay $10,000 to the Beth Israel Congregation to cover disinterment and reburial of the bodies and the purchase of a new cemetery.

Vandergrift.—Five hundred East Vandergrift High School pupils led by the band paraded the streets in early November advocating a new school building.

RHODE ISLAND

Harrisville.—Austin T. Levy, president and treasurer of the Stillwater Worsted Mills, Inc., has offered the board of education $100,000 for the construction of a new high school. He has also made a gift of land for the school site. A special town meeting will be held formally to accept the offer.

VERMONT

Rutland.—The board of school commissioners has adopted a five-year plan for the repair of school buildings, the care of grounds and the replacement of furniture and equipment. The plan calls for the employment of a full-time painter for the full period of five years, and a carpenter for four years, beginning in 1937. The commissioners have voted to discontinue the broadcasting of athletic events at Rutland High School.

Middle Western States

INDIANA

Columbia City.—A class for drum majors will be taught by Lawrence Johnston in charge of the Columbia City High School band and school music. A new school building in the town will have quarters for the band, consisting of a concert hall, five practicing rooms, Mr. Johnston's office and a music library.

IOWA

Creston.—The 200 pupils of the old Jefferson ward school, with their teachers, are being accommodated in another building, after an official inspection found their school building unsafe for occupancy.

Des Moines.—The November issue of *Midland Schools*, official publication of the Iowa State Teachers' Association, was commemorative of the fiftieth anniversary of the magazine. Many congratulatory notes from all sections of the country are contained in the issue.

Lake Mills.—The educational booth of the Lake Mills public schools last summer won for the fifth consecutive year first place at the Iowa State Fair. Miss Nettie Price, who supervised the preparation of the booth, this year received ribbons representing 40 first places, 12 seconds and 8 thirds.

Tracy.—Thieves broke into the consolidated school and stole eight typewriters valued at $500.

MICHIGAN

Battle Creek.—The W. K. Kellogg Foundation, the PWA and four local communities will jointly finance a large rural school building program in this vicinity. Four buildings will be erected, the largest at Delton at a cost of $130,000. Nashville and Olivet will have structures costing $100,000, and Middleville gets a $40,000 addition to its consolidated school. The main building at Middleville was constructed some time ago with the aid of a $40,000 contribution from the Kellogg Foundation. The foundation is supplying the architect for the four buildings.

Ann Arbor.—On November 15 and 16 a new research center for experimental work in paper making and wood pulp utilization was dedicated at the University of Michigan. The laboratory is the joint gift of paper products manufacturers of the state. . . . Work will begin as soon as possible on a tower to house the $50,000 carillon recently given to the university. It will be known as the Burton Memorial Campanile in memory of former President Marion LeRoy

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Burton. It will be 170 feet high, and will also house a number of studios for the school of music.

MINNESOTA

Brainerd.—A new band and orchestra room has been completed for the Brainerd schools and $2,000 has been voted for additional music equipment. About 250 pupils are enrolled in band and orchestra.

Winona.—The board of education will purchase for $20,000 an area three blocks square for school, playground and athletic field needs. A combined elementary and junior high school building will be erected on the site in two years, according to the pay-as-you-go building plan in operation in Winona. The regular ten-mill school building tax will finance the plant.

MISSOURI

Boonville.—The assembly hall at Kemper Military School has recently been equipped with new seats. They are of the folding metal type with laminated wood seats.

Louisiana.—The Rowley annex to the new Central School building was dedicated recently. Among the speakers were Lloyd W. King, state superintendent of public instruction; Col. A. M. Hitch, superintendent of Kemper Military School, and a PWA representative from St. Louis.

Southern States

FLORIDA

Miami Beach.—"With as many as 135,000 visitors expected", states James T. Wilson, supervising principal of the Miami Beach public schools, "instead of our school registration increasing 240 per cent during the school year, it may increase as much as 500 to 700 per cent." To meet this new demand approximately $700,000 is being spent on the construction of two new elementary schools, one new high school, a new gymnasium and an addition to an elementary school.

GEORGIA

Lafayette.—Mrs. A. R. Fortune has donated a seven-acre plot on South Main Street as a site for a new grammar school building.

Cartersville.—Badly out of repair and a fire hazard, the present domestic science building of the Cartersville High School is to be razed and a new structure erected in its place. A modern bungalow of five rooms, made of brick veneer, is contemplated. Part of the materials in the old building can be used in the new.

KENTUCKY

Frankfort.—Appropriate exercises marked the opening of the new dormitory at the Kentucky State Industrial College. The building, a PWA project, cost $130,000 and will accommodate 141 students.

Rob Roy.—The schoolhouse here with all its contents burned recently. School is being held in an old dwelling near by and arrangements are being made to construct a new building.

NORTH CAROLINA

Chapel Hill.—The University of North Carolina is donating a three-acre plot to Orange County as a site for a new building for the Chapel Hill High School. The department of education of the university has a cooperative arrangement with the Chapel Hill public schools. The gift was made to the county instead of the town, because the county, with the aid of PWA funds, is financing the construction of a $100,000 building.

SOUTH CAROLINA

Anderson.—Communities that formerly have been in nine different school districts in northeastern Anderson County, are now consolidated, and a $60,000 modern rural high school will serve them. The fourteen-teacher structure will be the largest consolidated school in South Carolina, it is believed.

Western States

CALIFORNIA

Delano.—The Delano Joint Union High School is to have a new farm and automobile mechanics building. Construction will be started in early December.

Glendale.—Citizens, by a four-to-one majority, recently voted to take junior college students out of tents and bungalows which they have occupied since the 1933 earthquake by approving a bond issue for new buildings.

Los Angeles.—The Los Angeles University of International Relations of the University of Southern California has been awarded the American FIDAC medal "given annually to the educational institutions in each of the allied countries having a curriculum best adjudged to encourage international understanding and friendship." The honor was given at the Brussels convention of the Federation Interalliée des Anciens Combattants, representing 8,000,000 Allied World War veterans, of which the American Legion is a branch.

Sacramento.—Charles C. Hughes, superintendent of schools, was much gratified at the unusually heavy vote at the recent school election in which a $300,000 bond issue for additions to the junior college and a $485,000 bond issue for additions to the senior high school were approved by a margin of 4 to 1.

IDAHO

Idaho Falls.—A citizens' committee appointed to investigate the central and junior high school buildings found the central school overcrowded, insanitary and hazardous and the junior high school up to date but overcrowded. A new unit for the junior high is recommended so that only the most desirable rooms at central school need be used.

OKLAHOMA

Ardmore.—Thirty-seven of the fifty-one school districts in Carter County will be able to operate a full nine months this year, it is announced by Charles L. Parker, county superintendent. Ten districts will be able to finance an eight and one-half-month term, and four districts will hold school eight months only. A total of $120,510 will be available for operating expenses (not including teachers' salaries and transportation) as compared with $86,425 available last year.

Duncan.—The teacher at Thomas School, thirteen miles northeast of here, with the help of a neighbor, killed a large wolf that entered the kitchen of the teacherage.

Guthrie.—A junior R. O. T. C. unit has been established in the Guthrie High School with Major John Russey as commandant. It is thought to be the only course of its kind in the state.

Okmulgee.—A large turnover in teachers is reported for the year by Supt. W. Max Chambers. Better jobs and marriage claimed twenty during summer and fall. A blanket increase of 6 per cent in salaries has been allowed for 1935-36.

Waukomis.—The school has installed this year a professional library for teachers. Each teacher was asked to lend a professional book from her personal library and the teachers as a group subscribed to a professional magazine.

OREGON

Salem.—During the past school year nearly 18,000 pupils from small rural elementary schools took part in county or community rural school music festivals in Oregon under a plan outlined by the state department of education. Numbers featured on the music festival programs were massed choruses of primary, intermediate and upper grade children, rhythm and harmonica bands, orchestras and audience singing.

TEXAS

Fort Worth.—During American Education Week the public was given opportunity to inspect the $4,227,000 building program in the city schools. Several civic organizations held their luncheon meetings in the school cafeterias.

WASHINGTON

Spokane.—The West Valley High School is rebuilding its stage to give more room in the wings and to accommodate the sliding of sets and scenery. Partitions are being torn out, floors rebuilt, a new ceiling is being constructed and a special platform for lighting apparatus built. New showers, dressing rooms and equipment rooms are being provided the physical education department. The improvements, financed by WPA funds, will cost $9,400.

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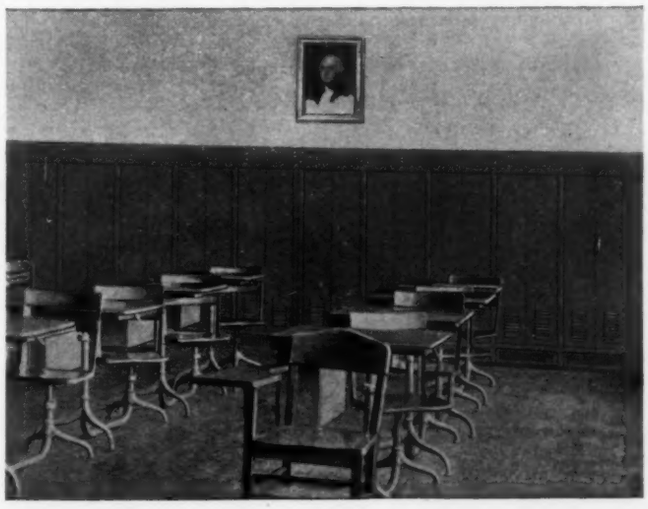

New York City Schools Bring Visual Aid Equipment Progressively Up to Set Standards

How far the schools of New York City have progressed in the plan, adopted in 1932, of bringing every school up to a minimum of equipment for visual education, is told by Rita Hochheimer, in charge of visual instruction, in a recent report covering the school year ending June, 1935.

The city schools now have approximately 470 classroom motion picture projectors, 225 beaded screens, 1,270 stereopticons, 950 opaque screens and 314,030 lantern slides in use, according to the report.

During the year this school system purchased 14,345 lantern slides for 66 schools. Of these, 3,834 were acquired to replace antiquated material.

Eighty-one motion picture projectors and 99 screens for classroom use were purchased and sent into the schools. The new screens and projectors are assigned to schools about to be served through a district film library. Five new field libraries have been added with 45 reels each. Each library is under the direct supervision of an assistant superintendent and serves the schools under his jurisdiction. Eleven such film libraries covering outlying districts of Brooklyn, the Bronx, Queens and Richmond are now operating.

The central film library, which the bureau maintains, has a total of 1,200 reels, some 300 of which were purchased last year. These were acquired largely out of budgetary appropriations. Some 118 reels were obtained last year on loan from the motion picture bureau of the Canadian government.

The most significant aspect of the bureau's work last year, in Miss Hochheimer's opinion, was that of training teachers in the methods of using visual aids.

This service takes two forms; teachers' guides to all film lessons distributed by the bureau, and demonstration lessons. The teachers' guides are in outline form. Demonstration lessons are presented by visual instruction counselors.

Another service, which the bureau has rendered occasionally, is to interpret this phase of school work to the general public.

Films for the School Screen

Life and Literature Series—IV. France

Paris — Modern views of French capital — Eiffel Tower, Trocadero, the Louvre and others. ¼ reel. 16 mm., silent. For rent or purchase. Eastman Kodak Company, Rochester, N. Y.

Paris and Its Environs — City of Paris, Versailles, Rambouillet, St. Germain, Malmaison, Chantilly, Fontainebleau. Running time, 6 minutes. Transportation charges only. 35 mm., silent. Railways of France, 610 Fifth Avenue, New York City.

Paris — Views of Paris from boat on the Seine, past the Isle de la Cite to Notre Dame; points of historic interest. 1 reel. 16 mm., silent or sound. For rent or purchase. Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago.

Nine Glories of Paris — Arch of Victory, Sacred Heart on Montmartre, Eiffel Tower, Place de la Concorde, Arch of the Carrousel. ¼ reel. 16 mm., sound or silent. For rent or purchase. Burton Holmes Films, Inc., 7510 N. Ashland Avenue, Chicago.

Peasant Life in Central France — Picturesque scenes portray daily life; silk industry in Lyons. 1 reel. 35 mm., silent. For rent or purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Mount Pelvoux in the Alps — Picturing ascent of that mountain. Views of glaciers, alpine huts. Projection time, 7 minutes. 35 mm., silent. Transportation charges only. Railways of France, 610 Fifth Avenue, New York City.

Chateaux on the Loire — Views of Blois, Chambord, Amboise, Saumur, Luynes, Langeais, Chinon, Azay-le-Rideau. Running time, 3 minutes. 35 mm., silent. Transportation charges only. Railways of France, 610 Fifth Avenue, New York City.

Chateaux of France — Beauty and historic significance. 1 reel 16 mm. and 35 mm., silent. For rent or purchase. Society for Visual Education, Inc., 327 S. LaSalle Street, Chicago.

The South Coast of Brittany — Quimper, Plougastel, St. Anne d'Auray. In colors. With scenes of Pardons, native costumes. Running time, 10 minutes. Transportation charges only. Railways of France, 610 Fifth Avenue, New York City.

Au Pays Breton — Scenic views of Brittany, costumes and customs, old buildings. 1 reel, in French. 35 mm., sound. Fifty cents per reel, in advance, and transportation charges. French Government Tourist Office, 4 East 52d Street, New York City.

Cahors and the Valley of the River Lot, Route des Pyrénées Orientales, La Loire and Le Mont Blanc—Four films, 35 mm., silent, with French titles, available free, from the French embassy, Washington, D. C.

Côtes Normandes — Ports, coastlines, countryside, customs and costumes of the country. 1 reel, in French. 35 mm., silent. Fifty cents, in advance, and transportation charges. French Government Tourist Office, 4 East 52d Street, New York City.

Le Bourbonnais—Scenic views, countryside and grainfields. 1 reel, in French. 35 mm., silent. Fifty cents, in advance, and transportation charges. French Government Tourist Office, 4 East 52d Street, New York City.

Sans Famille — New film recommended for high school use by motion picture committee, International House, University of Chicago. Running time, 1½ hours. 35 mm., sound. New World Pictures Inc., 729 Seventh Avenue, New York City.

Maria Chapdelaine — New film recommended for high school use by motion picture committee, International House, University of Chicago. Available in early 1936. English titles. 35 mm., sound. For rent or purchase. Franco-American Film Corporation, 66 Fifth Avenue, New York City.

Geology Series Latest University Film Release

Six new sound films in the field of geology suitable for use in high school and junior college, as well as in college, courses have just been released by the University of Chicago. The première showing of these films was given before an invited group of scientists and educators on November 11.

The National Park Service cooperated with the geology staff of the University of Chicago and with Erpi Picture Consultants in making the films, many of which represent physical features in the national park system. Dr. Carey Croneis, a university geologist, wrote the scenarios, supervised the films and makes the running comments explaining them.

These films show only present geological processes, and cover the work of ground water, atmosphere, ice and rivers, mountain building and volcanoes.

President Robert M. Hutchins of the University of Chicago in introducing the films to the first night audience declared that students see them three times in their physiography course — as an introduction to the subject, as an integral part of the teaching, where individual frames may be shown, and in review of the work.

Other geology films depicting the earth's past are contemplated for future production.

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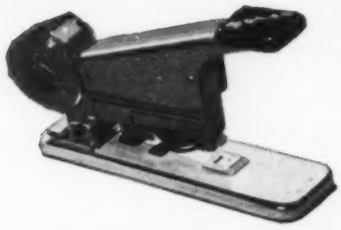

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Oregon Station Forms High School Radio Guild

A high school radio guild is being developed by KOAC, Oregon State Agricultural College. The purpose of the guild, which is taking on tremendously with secondary school pupils, is to foster interest in better radio broadcasts.

Guild members are provided with information and suggestions that will help them analyze radio programs and prepare material for radio presentation.

References for studying the psychology of the radio audience, aids for analyzing and writing talks, interviews, skits and plays are supplied by KOAC. A check sheet for scoring the various types of radio presentations is also supplied.

Another interesting use of radio at Oregon is its tie-up with correspondence study courses. Weekly discussions over the air are keyed to the topics assigned in the various study courses. From listening to these discussions, the pupils gain additional insight and inspiration in the courses.

In some cases groups form correspondence study clubs. These clubs hold meetings at the time of the broadcasts; at the meetings they view exhibits connected with the work, according to L. L. Roberts in the bulletin issued by the National Association of Educational Broadcasters.

New Studio for KFJM

Station KFJM, University of North Dakota, has recently completed a new broadcasting studio in one of the university buildings. A committee of five undergraduate students secures the speakers and supervises the broadcasts that go to high schools. Special arrangements have been made with a number of high schools to listen to these fifteen-minute daily programs.

Preschool Age Broadcast Part of Detroit Program

An innovation in educational programs is offered by the Detroit public schools in its broadcast entitled "Our Children." This program is devoted to the problems of the preschool child, and is thought to be the only such program on the air in this country.

The department of visual and radio education of the Detroit schools is now on its second year of broadcasting. Its programs are of two types — those to be broadcast directly into the classroom and those designed for the home.

Among the programs that are being presented for classroom use are "Our World Today," which is being addressed to the fifth and sixth grades. "Men and Affairs" is designed for pupils of high school grade. This broadcast is largely current events.

Programs written and presented for parents and other friends of education include "The News in Education," a review of current trends and events in the field of education; the "Child Welfare" program, designed to advise the parent on problems dealing with children; "Everybody's Business," a program devised to stimulate interest in school and community problems, and "Bringing Up the Family," a skit.

Tufts Opens Powerful Station

One of the most powerful amateur radio stations in the country has been opened at Tufts College. Its transmitter is rated at 500 watts. The Tufts College Radio Society was founded in 1910. The society is arranging for regular schedules of communications with other American university stations and with foreign amateurs.

On the Air During December

The following programs of particular interest to school people are arranged by the National Broadcasting Company and the Columbia Broadcasting System. The time is Eastern Standard except when otherwise specified.

Daily

National Farm and Home Hour[1]—12:30-1:30 p.m. (NBC-WJZ).

Monday

History Series—2:30-3:00 p.m. (CBS).
- Dec. 2—Charleston.
- Dec. 9—Philadelphia.
- Dec. 16—Detroit.

Tuesday

Your Child, Dr. Ella Oppenheimer, Children's Bureau, U. S. Department of Labor—11:15-11:30 a.m. (NBC-WEAF).

Science Service Series—4:30-4:45 p.m. (CBS).

Treasure Trails in Art Series—2:30-3:00 p.m. (CBS).
- Dec. 3—Patterns in Mosaic Pictures.
- Dec. 17—Color Around Us Everywhere.

Literature Series—2:30-3:00 p.m. (CBS).
- Dec. 10—Why the Chimes Rang (Intermediate).

Medical Emergencies and How They Are Met, dramatized program with incidental music, American Medical Association — 5:00-5:30 p.m. (NBC-WJZ).
- Dec. 3—Tuberculosis, Dr. Morris Fishbein.
- Dec. 10—Hunting Accidents, Dr. Morris Fishbein.
- Dec. 17—Animal Diseases in Man, Dr. W. W. Bauer.
- Dec. 24—Eat, Drink and Be Merry, Dr. W. W. Bauer.
- Dec. 31—Pneumonia, Dr. W. W. Bauer.

You and Your Government, National Advisory Council—7:45-8:00 p.m. (NBC-WEAF).
- Dec. 3—Planning as a Municipal Function, George McAneny, president, Regional Plan Association.
- Dec. 10—Planning as a State Function, Alfred Bettman, president, American Society of Planning Officials.
- Dec. 17—Relocating the Isolated Settler, Walter A. Rowlands, specialist in land economics, University of Wisconsin.
- Dec. 24—Making Plans Come True, Chester H. Rowell, editor, *San Francisco Chronicle*.
- Dec. 31—The Law of the Roadside, Flavel Shurtleff, counsel, American Planning and Civic Association.

Wednesday

National Congress of Parents and Teachers—2:30-3:00 p.m. (NBC-WEAF).
- Dec. 4—The Guidance of Children's Reading, William S. Gray, professor of education, University of Chicago.
- Dec. 11—Education for the Very Young, Edna Dean Baker, president, National College of Education, Evanston.
- Dec. 18—Environment Molds Your Child, Frank N. Freeman, professor of educational psychology, University of Chicago.

Geography Series—2:30-3:00 p.m. (CBS).
- Dec. 4—Monaco, Another Small Country.
- Dec. 11—Andorra of the Pyrenees.
- Dec. 18—Albania in the Mountains.

Our American Schools, directed by Belmont Farley—7:30-7:45 p.m. (NBC-WEAF).

The Cavalcade of America, dramatization of significant moments in American History—8:00-8:30 p.m. (CBS-WABC).

Thursday

Music Appreciation Series, Standard School Broadcasts,[2] 11:00-11:20 a.m., (elementary); 11:25-11:45 a.m., (advanced). (NBC).

Music and Elementary Science Series—2:30-3:00 p.m. (CBS).
- Dec. 5—The Snow Maiden (primary), and How Soil Was Formed.
- Dec. 12—The Pyrenees (intermediate) and The Everchanging Earth.
- Dec. 19—Romance in a Toy Shop (primary) and Life Starts on the Earth.

"To Arms for Peace," World Peaceways Series—9:30-10:00 p.m. (CBS-WABC).

Friday

Music Appreciation Hour, under the direction of Walter Damrosch. Series A and C—11:00-12 m. Series B and D—11:30 a.m.-12:30 p.m. (NBC-WEAF and NBC-WJZ).
- Dec. 6—Series A, Flute and Clarinet. Series B, Fairytales in Music.
- Dec. 13—Series C, Theme and Variations. Series D, Mozart Program.
- Dec. 20—Series A, Oboe, English Horn and Bassoon. Series B, Animals in Music.

Vocational Guidance and Current Events Series—2:30-3:00 p.m. (CBS).
- Dec. 6—The Chemist Creates New Jobs.
- Dec. 13—New Avenues of Work for the Artist.
- Dec. 20—Forestry Services for Lovers of the Outdoors.

American Industrial Problems, Workers Education Bureau of America, American Federation of Labor and the National Advisory Council on the Radio in Education—6:45-7:00 p.m. (CBS).
- Dec. 6—Labor Standards, Arthur Wharton, president, International Association of Machinists, and David Dubinsky, president, International Ladies' Garment Workers' Union.
- Dec. 13—Dictatorship and Democracy, Matthew Woll, vice president, American Federation of Labor, and William English Walling, writer.
- Dec. 20—Workers' Education, Spencer Miller, Jr., director, Workers Education Bureau of America.

Saturday

Our American Schools, directed by Florence Hale—11:00-11:15 a.m. (NBC-WEAF).

Sunday

University of Chicago Round Table Discussions—12:30-1:00 p.m. (NBC-WEAF).

Philharmonic Society of New York, Otto Klemperer, conductor—3:00-5:00 p.m.

Ford Sunday Evening Hour, Victor Kolar, conductor—9:00-10:00 p.m.
- Dec. 1—Albert Spalding, violinist.
- Dec. 8—Lauritz Melchior, tenor.
- Dec. 15—Elisabeth Rethberg, soprano.
- Dec. 22—Quartet: Grete Stueckgold, soprano; Kathryn Meisle, contralto; Richard Crooks, tenor; Ezio Pinza, bass-baritone.
- Dec. 29—Charles Kullmann, tenor.

General Motors Concerts, Erno Rapee, conductor—10:00-11:00 p.m. (NBC-WEAF).
- Dec. 1—Jeanette McDonald, soprano.
- Dec. 8—Richard Crooks, tenor.
- Dec. 15—Albert Spalding, violinist.
- Dec. 22—Gladys Swarthout, mezzo-soprano.
- Dec. 29—John Charles Thomas, baritone.

[1]Except Sunday.
[2]Pacific Coast stations only.

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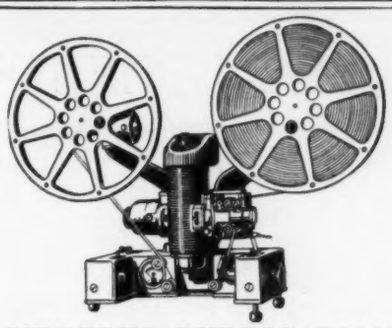

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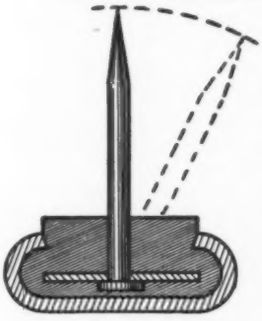

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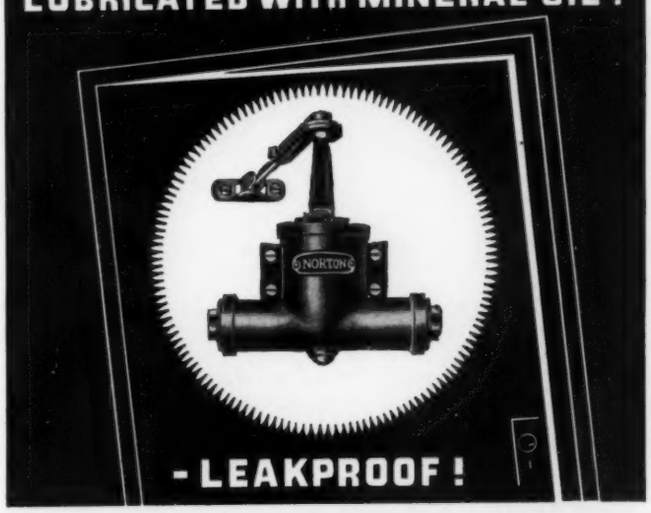

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NAMES IN THE NEWS • • • • •

Eastern States

MRS. E. LLOYD SANDERSON, former trustee of the Spence School, New York City, has been appointed temporary head mistress of the school. Mrs. Sanderson will fill this assignment pending the appointment of a head mistress to succeed the late Valentine L. Chandor, who died recently.

THE MOST REV. PHILIP RICHARD MCDEVITT, bishop of the Harrisburg diocese of the Roman Catholic Church and widely known in Catholic educational circles in America, died at the age of seventy-seven. For several years Bishop McDevitt was superintendent of the archdiocesan schools of Philadelphia.

DR. FRED G. HOLLOWAY has been made president of Western Maryland College, Westminster, Md. For three years Doctor Holloway was president of Westminster Theological Seminary.

C. HERBERT TAYLOR, principal of Edward Little High School, Lewiston, Me., has resigned to accept a position as head master of the high school of Cranston, R. I., a suburb of Providence.

K. FIFE STERRETT is the newly elected principal of the high school at Monessen, Pa. THOMAS PRESTON has been assigned to the newly created position of high school principal.

WILLIAM H. DENISON has resigned as deputy superintendent of public instruction in Pennsylvania. He has been in charge of school law since 1925; he also organized the child accounting system.

W. LEE GILMORE, superintendent of schools, Oakmont, Pa., and SAMUEL H. JONES, supervising principal, Verona, Pa., recently received the American Legion award "for their outstanding work in promoting Americanism and citizenship in the community."

C. MILTON WRIGHT, superintendent of schools of Hartford County, is the new president of the Maryland State Teachers' Association.

ARNAUD C. MARTS, president of Marts and Lundy, Inc., New York City, is serving as acting president of Bucknell University.

WADE F. BLACKBURN took office on November 1 as superintendent of public schools, Monessen, Pa. He succeeds SAMUEL FAUSOLD, whose appointment as deputy superintendent of public instruction was announced last month. Mr. Blackburn has been principal of the Monessen High School for eleven years.

DR. JAMES L. MURSELL, former professor of education at Lawrence College, is now associate professor of education at Teachers College, Columbia University.

JOSEPH C. BROWN, superintendent of schools, Pelham, N. Y., is the new president of the New York Council of Superintendents.

DR. WILLIAM S. A. POTT has been made president of Elmira College, Elmira, N. Y. Doctor Pott is reentering the field of education after five years in industrial work. Prior to that time he was identified with the University of California, the University of Virginia and St. John's University in Shanghai, China.

CHARLES DORIS, principal of Public School 129, Brooklyn, N. Y., died at his home in Brooklyn. Mr. Doris had been associated with the New York public school system since 1909.

DR. FLORENCE RENA SABIN of the Rockefeller Institute for Medical Research was awarded the M. Carey Thomas prize of $5,000 of Bryn Mawr College in recognition of eminent achievement. The presentation was made on November 2 at the observance of the fiftieth anniversary of the founding of the college.

DR. JAMES T. SHOTWELL, professor of history, Columbia University, and a director of the Carnegie Endowment for International Peace, has received the degree of Doctor of Political Science, honoris causa, from the University of Budapest, on the occasion of ceremonies marking the 300th anniversary of its founding.

CHARLES H. ABBOTT is the new principal of Nathan Bishop Junior High School, Providence, R. I. He has been head of several Providence elementary and junior high schools since he came from Maine in 1926.

PAUL R. CARL is acting supervising principal of the Audubon public schools, Audubon, N. J., until June 15, 1936, while Mr. Fidler completes his year's leave for study and research work.

HENRY L. ADAMS, former instructor in education and social science as well as athletic director at Arnold College, New Haven, has been elected principal of Seymour High School, Seymour, Conn.

Middle Western States

H. B. MCCARTY, WHA, University of Wisconsin, is the new president of the National Association of Educational Broadcasters. Mr. McCarty has just returned from England, where he has been making a study of radio as it is used for educational purposes.

L. A. VAN DYKE is the new principal of Smith-Cotton High School, Sedalia, Mo.

LESLIE A. CHILDRESS, principal of Wanatah High School, LaPorte County, Ind., for fourteen years, died recently.

GEORGE CARROLL assumed, in late October, the duties of principal of Cresco High School, Cresco, Iowa, succeeding Mr. Bartelma, who resigned to become head wrestling coach at the University of Minnesota. Mr. Carroll has been principal at Toledo, Iowa.

P. D. POINTER is principal of the combined Central Junior-Senior High School, South Bend, Ind., and E. N. FISHER is the new assistant principal. J. S. MCCOWAN, former principal, retired last June. The school has 3,500 pupils and 120 teachers.

DR. HENRY GERLACH JAMES was inaugurated on November 15 as the twelfth president of Ohio University, oldest institution of high learning in the Northwest Territory and oldest university west of the Alleghanies. President James comes from a family of distinguished educators. His father, the late Edmund J. James, was for sixteen years president of the University of Illinois, and his uncle, George Francis James, was dean of the college of education at the University of Minnesota for ten years. Dr. Henry James is the former president of the University of South Dakota.

RALPH STINSON, for fourteen years superintendent of schools at Wilson, Kan., has been appointed state high school supervisor. MENNO VOTH, high school principal in Wilson, has been promoted to the superintendency.

DR. EUGENE B. ELLIOTT took over the position of superintendent of public instruction of Michigan on October 24, when the supreme court handed down its decision confirming the appointment. He appointed LEE M. THURSTON, former assistant superintendent of Ann Arbor schools, deputy superintendent, succeeding DR. DAVID D. HENRY, resigned. PAUL CRESSMAN has been appointed assistant superintendent in charge of instruction activities.

DR. JOHN A. PAGE, former high school inspector and director of secondary education in the North Dakota State Department of Education, is now assistant professor of education, University of North Dakota.

GEORGE H. ROCKWOOD, former principal of the Austin High School, Chicago, died recently in La Jolla, Calif., at the age of eighty-one years. He gave forty years to service in the public schools of Chicago.

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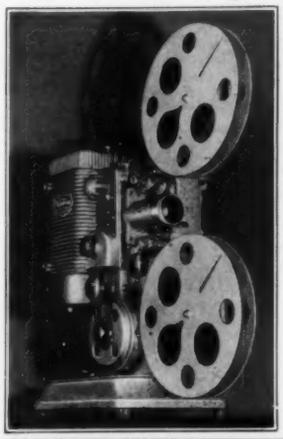

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Southern States

NATHAN W. WALKER has been forced by ill health to resign from the department of education at the University of North Carolina of which he was the head.

C. H. WAGNER has been named acting principal for the rest of the year at Mt. Clare Junior High School, Clarksburg, W. Va.

W. D. VINCENT, former principal of Great Falls High School, Great Falls, S. C., has been appointed head of the new vocational textile school at Schoolfield, Va.

H. J. WATKINS is serving his twenty-third consecutive year as division superintendent of schools, Halifax County, Virginia.

DR. J. C. PHIPPINS, former principal at Atkins, Va., is now high school principal at Blacksburg, Va.

E. B. BROADWATER is principal of Andrew Lewis High School, Salem, Va., succeeding R. W. HOUSE. Mr. Broadwater was formerly principal of schools at Chatham, Va.

HERMAN THAMES is the new superintendent of Oakvale Consolidated School, near Monticello, Miss. He succeeds J. V. BOOTH, who recently resigned to become district supervisor of the National Youth Aid.

District of Columbia

HENRY F. ALVES, former staff member of the state department of education of Texas, has been appointed senior educationist in charge of state school administration in the federal Office of Education. It is a new position.

Western States

D. J. HENRY, principal of Lincoln Grammar School and supervising principal of the elementary school department, Napa, Calif., has been granted a six months' leave of absence because of ill health.

MRS. R. L. RIGGS, superintendent of the Arkansas School for the Deaf, Little Rock, died recently. She followed in the footsteps of her father, a missionary to the deaf, and her mother, also an instructor of the deaf.

PROF. N. C. ABBOTT of the Eastern Montana Normal School, Billings, is the new president of the Montana Education Association.

EDWIN LE TENDRE has been named principal of the John Muir Elementary School, Berkeley, Calif. H. N. MCCLELLAN, director of the curriculum and visual education for the school department, will take Mr. Le Tendre's former post of associate principal of University Elementary School.

REX O. MORRISON is the new principal of the high school at Ada, Okla., having served in a similar capacity for six years at Pauls Valley, Okla.

WALLACE BAILEY succeeds J. B. STEVENSON as principal of the high school at Russellville, Ark. Mr. Stevenson resigned to accept a WPA position.

JOHN W. PATTERSON is supervisor of rural schools at Southeastern Teachers College, Durant, Okla. His former position as superintendent of schools at Ringling, Okla., is being filled by J. D. PUCKETT.

JOHN FRANCIS CRAMER, former superintendent of schools at Grants Pass., Ore., is the new superintendent at The Dalles, Ore., replacing C. W. BOETTICHER, who has retired after fifty-one years of teaching and administrative work. Supt. Cramer recently returned from six months of travel and study in Australia and New Zealand under the auspices of the Carnegie Corporation and the Australian Council for Educational Research.

FLORETTA MCNEESE of Classen High School, Oklahoma City, Okla., has been made director of all curriculums for secondary schools in Oklahoma City. Dr. F. A. BALYEAT, who has been giving half-time to this work, is unable to continue because of the pressure of university duties.

JOHN T. CLAYTON, principal of the Heronville School, Oklahoma City, died recently.

D. J. HENRY has been granted a six months' leave of absence from the principalship of Lincoln School, Napa, Calif. MRS. BERTHA COOK, the vice principal, has assumed the post.

HARRY M. SHAFER, assistant superintendent of Los Angeles schools, died of a heart attack at the Stanford-U. S. C. football game November 9.

Detroit Tries New Report Card

A new report card is on trial this year in the elementary schools of Detroit. Under scholarship, the subjects taught are marked "S" (satisfactory), "U" (unsatisfactory), or in a few cases "E" (excellent). In addition to this report on the work of the academic subjects, the card carries a section devoted to citizenship. Such qualities as adaptability (being able to meet new situations well), cooperation (working and playing well with others), courtesy, initiative and reliability are checked if the teacher believes that quality needs development.

Current Aids to Teaching

Two new expressions in the development of supplementary material for the modern social studies curriculum have made their initial appearance this fall. The Society for Curriculum Study, after a period of experimentation, offers the "Building America" Series, a monthly photographic study of modern problems covering basic studies. In format and in material presented this new addition to textual material sets an unusually high standard. The project is entirely noncommercial in character. Another expression of the same idea is "Our Times," published by the American Education Press (Columbus). The material and point of view are in many respects similar to "Building America."

"Education Digest" Makes Bow

A new publication, the *Education Digest*, has recently been issued which contains condensations of noteworthy articles taken from the leading professional and lay publications. It is a pocket size magazine. The editorial offices are in Ann Arbor, Mich. Two articles from THE NATION'S SCHOOLS were abstracted in the first issue.

Coming Meetings

Nov. 29-30—Idaho Education Association, Boise.

Nov. 29-30—Representative Assembly, Washington Education Association, Seattle.

Dec. 4-7—American Vocational Association, Chicago.

Dec. 7—Delegate Assembly, Nebraska State Teachers Association.

Dec. 20-21—Association of Business Officers of Preparatory Schools, Tarrytown, N. Y.

Dec. 26-28—Illinois State Teachers Association, Springfield.

Dec. 26-28—Ohio Education Association, Columbus.

Dec. 26-28—Oregon State Teachers Association, Portland.

Dec. 26-28—Pennsylvania State Education Association, Harrisburg.

Dec. 27-28—National Council of Geography Teachers, St. Louis.

Jan. 2-4—Florida Education Association, Orlando.

Jan. 16-17—Association of American Colleges, New York City.

Feb. 6-8—Oklahoma Education Association, Oklahoma City.

Feb. 18-22—National Association of Deans of Women, St. Louis.

Feb. 19-22—National Vocational Guidance Association, St. Louis.

Feb. 21-22—American Association of Teachers' Colleges, St. Louis.

Feb. 22-27—Department of Superintendence, N. E. A., St. Louis.

March 12-14—South Carolina Education Association, Columbia.

March 26-28—Alabama Education Association.

April 11—California Teachers Association, San Francisco.

April 15-18—Kentucky Education Association, Louisville.

April 16-18—Georgia Education Association, Macon.

April 18—Annual meeting of delegates, Massachusetts Teachers Federation.

June 28-July 2—National Education Association, Portland, Ore.

CLEAN FLOORS **CLEAN SCHOOLS**

Keep the school floors clean and the rest is easy. For it is the floor that receives a new layer of incoming dirt every day. It also receives all the dust that settles in the room. Dirt and dust is redistributed from the floor unless it is removed frequently and thoroughly down to the last crevice and corner.

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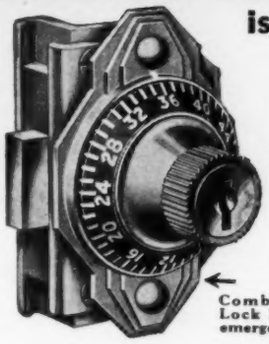

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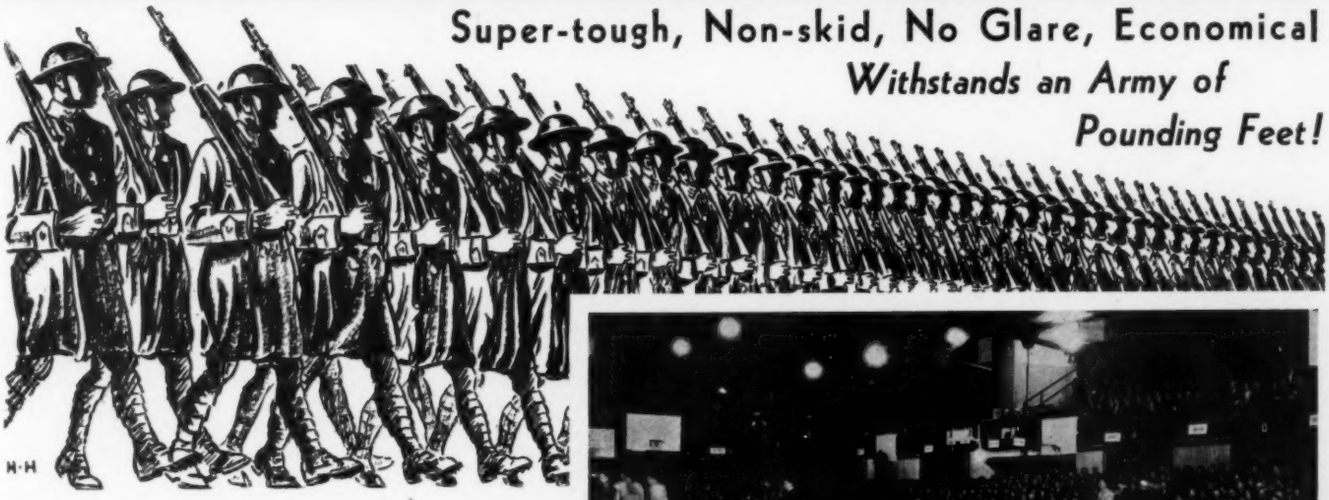

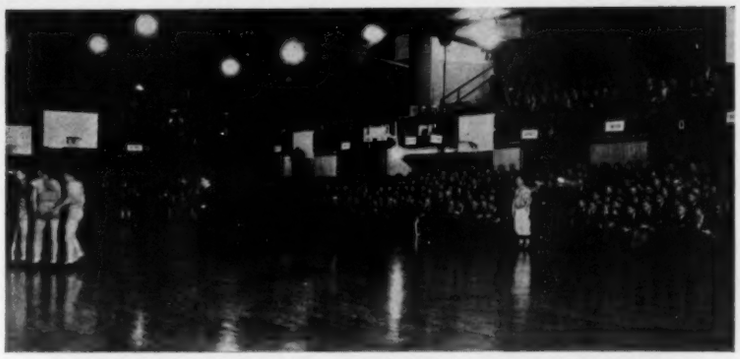

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NOTES FOR BUYERS • • •

Gypsy Tea Room

"You can see yourself the shape the leaves have taken. Right down here in the cup, next to the bad luck sign —see they make a ladder. Beware of a ladder, Friend. Don't ever climb a rickety ladder! A fine gentleman like you, of course, may not be that kind of a climber, but the men who work in your school building—there's where the bad luck may come.

"Buy a Dayton* safety ladder, Friend. Get several of them. Do away with all the old ladders. They will bring sore trouble, mark my words. Outside of unsteady ladders in your life, Friend, and a dark woman—also a bit unsteady—I see nothing but fame and good fortune for you. There will be a letter with money in it, a long ocean voyage and great success. Thank you, Friend. Mind what I say about falling—from a ladder or for a dark lady."

Dry Humor

It takes a right tricky mechanism to be trickproof when it is installed in schoolhouses. We have visited schools where the turning on of an electric dryer was an innocent invitation to a shower of black ink, hair pins and washroom litter.

The campus humorists are nonplused over the Electric Towel, made by McCord, 2588 East Grand Blvd., Detroit. It has humor of the dry and instantaneous type. Being nonstuffable, it gives slight leeway for Mack Sennettism or for what the school doctor calls "foreign body accidents."

Paper towels and cloth towels are not cheap, and when a speedy electric towel comes along school men are openly impressed. They are putting them in the washrooms, of course, but a newer note (public health journals, please copy) is the battery of washbowls and electric dryers adjoining the lunchroom or cafeteria.

The Dumb Shall Speak

It's time you knew about a friend of ours. A silent sort of specimen this —honest, reliable, one of deeds not of words.

And now the Surprise Element. Our strong silent hero suddenly bursts into eloquence—orates, sings, makes music, makes merry. A complete reversal of character.

Medicine can't explain it. It isn't another correspondence school miracle. Our friend, R. Ampro, the man of silence, becomes vocal by mechanical conversion.

Credit goes to the Ampro Corporation, 2851 N. Western Avenue, Chicago, for making the dumb speak. Its new Model R silent projector, capable of later sound conversion, is a blessed boon to underprivileged departments of visual education.

*Dayton Safety Ladder Co., 121 West Third Street, Cincinnati, Ohio.

Barely Possible

The school nudists succeed in getting into even more hot water than do adult nudists.

Practically every American high school now has a segregated area where the nudes frolic. Under board of education rules, bathing is the only sport permitted in these nudist colonies and the shower is official equipment. But the schools must strip off some of the excess costs in this sport, which are at decided variance with the true nudist spirit.

The Crane Co., 836 South Michigan Avenue, Chicago, has ever felt a strong spiritual pull toward the nudist cult. Now it comes out with a real money saver for nudist colonies, school or field. Instead of the common round bath shower spray, which wastes hot water in a prodigal circle around the nudist, Crane has invented an elliptical outlet that directs all the water on the bather's bareabouts.

Taut for Years

If now and again you get into a state of tension, consider a good wire fence. In its case the tension is constant and lifelong. Only the very best fence can endure such a taut condition year in and year out without sagging.

A fence that lacks this sort of backbone is a poor fence for school grounds. The superintendent can learn the tensile strength by means of the Preece test, an accepted test for uniformity of zinc coating. We recently saw a chain-link fence stamped "Cyclone 12m." This means, we were told, that it can withstand a minimum of 12 one-minute immersions by this test. The Cyclone Fence Company, Waukegan, Ill., asks school purchasers of chain-link fence to apply the test before they buy.

Fortification

The steel locker, being no stronger than its weakest lock, is a natural challenge to the key-collecting and lock-picking instincts of adolescence. However, in many schools today the petty thieves who rifle lockers must pit their wits against combination padlocks. Among these watch-and-wardens is the Champ, awarded a Master's degree after some four years of research and engineering investigation.

The Champ makes a locker a stronghold, from all we can gather, for it is produced in more than 100,000 combinations. Four-number dialing is required to open the locker, and double protection is given gym shoes, lunches and love notes because the locking tumblers are automatically disturbed by the shackle as the lock is opened. Once the shackle is returned, the only way the lock can be reopened is by redialing the correct combination. The Champ's alma mater is the Master Lock Company, 926 West Juneau Ave., Milwaukee.

We Are Fourteen

Our guess is that there will be far fewer disputes over the Trane Company's fourteen points than over Woodrow Wilson's. Our Trane did not set off with a Colonial House for Versailles, but stayed right at home in LaCrosse, Wis., and began writing down points. They soon added up to fourteen.

Point I gives to Air-O-Lizer the exclusive claim to Directional Flow Grilles. To make clear just what a prize this is, let us point out that these Grilles make it possible to direct heated air to any desired point in the interior. They blanket bare spaces completely with a curtain of heat. No more cold spots or drafts in any home or schoolhouse.

Point II gives this same Air-O-Lizer a guarantee against freezing, because of ventilated pipe spaces. Point III excludes noise and vibration. Point IV cuts down unit operating costs by means of felt-lined dampers.

Air-O-Lizer, as you know, is an air conditioning unit.

The Fairy Prince

"Beauty and the Binding" is a brand new story in school books. For long years there just wasn't enough good looks for all the good books. The result was that the school book was invariably the Ugly Duckling.

If a schoolbook had been listed among the Fifty Best Books of the Year by the American Institute of Graphic Arts, this Chicken Little would have cried: "The sky is falling."

Oftener of late a schoolbook Cinderella finds her prince and lives happily ever afterward arrayed in a handsome cloak. A favored prince comes from the ruling house of E. I. du Pont de Nemours of Newburgh, N. Y. He binds his schoolbook princess not in cloth of gold, but in the new PX Cloth or Fabrikoid, either of which are not only beautiful but are washable, waterproof and durable.

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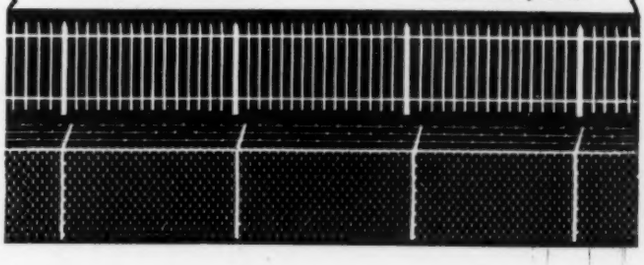

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THE BOOKSHELF • • •

THE CHART OF PLENTY. *A Study of America's Product Capacity Based on the Findings of the National Survey of Potential Product Capacity. By Harold Loeb and Associates. New York: The Viking Press,* 1935. *Pp.* xv+180. $2.50.

If you have been attracted by recent "share the wealth" programs, it is suggested that you read carefully this significant survey. A significant contribution!

A TERCENTENARY HISTORY OF THE BOSTON PUBLIC LATIN SCHOOL 1635-1935. *Harvard Studies in Education Volume* 25. *By Pauline Holmes. Cambridge: Harvard University Press,* 1935. *Pp.* xxiv+541. $3.50.

As a climax to the tercentenary celebration comes this unusually complete history of a famous institution. Invalunable both as a record and as a reference.

PHILOSOPHY AND THE CONCEPTS OF MODERN SCIENCE. *By Oliver L. Reiser. New York: The Macmillan Company,* 1935. *Pp.* xvii+323. $3.50.

An attempt to produce a scientific synthesis for modern science and develop certain integrating principles. Both the physical and social sciences are considered.

HOMEMAKING. AN INTEGRATED TEACHING PROGRAM. *By Evelyn M. Herrington. New York: D. Appleton-Century Co., Inc.,* 1935. *Pp.* xii+205. $2.

A teacher of home economics writes interestingly for secondary teachers upon an integrated teaching program in homemaking.

ORGANIZATIONS FOR YOUTH. *By Elizabeth R. Pendry and Hugh Hartshorne. New York: McGraw-Hill Book Co., Inc.,* 1935. *Pp.* xii+359. $2.75.

Descriptive presentation in effective form of forty agencies designed to meet the needs of youth. Programs and procedures capably described.

FAMOUS CATHEDRALS AND THEIR STORIES. *By Edwin Rayner. New York: Grosset & Dunlap, Inc.,* 1935. *Pp.* 48. *Illustrated.* $1.

An invaluable book for both elementary and secondary school libraries.

WOMEN IN EIGHTEENTH-CENTURY AMERICA. A STUDY OF OPINION AND SOCIAL USAGE. *By Mary Sumner Benson. New York: Columbia University Press,* 1935. *Pp.* 343. $4.

Scholarly description of the position of woman from both the standpoint of the theorist who wrote about what woman should do, to the study of journals and letters which told what she actually did do.

THOMAS DUCKETT BOYD. THE STORY OF A SOUTHERN EDUCATOR. *By Marcus M. Wilkerson. Baton Rouge: Louisiana State University Press,* 1935. *Pp.* 374. *Illustrated.* $2.50.

A valuable addition to the history of public education is this friendly and sincere delineation of one of the South's great post-war educationists.

AFTER CORONADO. *Spanish Exploration Northeast of New Mexico,* 1696-1727. *(Documents from the Archives of Spain, Mexico and New Mexico.) Translated and edited by Alfred Barnaby Thomas. Norman: University of Oklahoma Press,* 1935. *Pp.* xii+307. $3.50.

Another one of those studies of Spanish exploration north of the Rio Grande that are slowly forcing a complete rewriting of the early history of the North American continent. Valuable as source book for secondary schools.

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FRONTIER DAYS. *Edited by Oliver G. Swan. New York: Grosset & Dunlap, Inc.,* 1935. *Pp.* 250. *Illustrated.* $1.

Here the glamor and romance of the old West have been captured for the children of today in one volume from Avery, Cody, Harte, Hough, Grinnell, Garland and others. Recommended for later elementary and junior high school libraries.

SOCIAL GAMES FOR RECREATION. *By Bernard S. Mason and Elmer D. Mitchell. New York: A. S. Barnes & Co., Inc.,* 1935. *Pp.* vi+421. *Over 200 illustrations.* $2.50.

Games that revive old memories and games we never heard of before, including some worth while even for adults, are included in this excellent collection of more than 1,200 suggestions for entertainment and exercise. It can be recommended for both elementary and secondary school libraries.

ATLAS DE L'ENSEIGNEMENT EN FRANCE. *Prepared by a committee of the International Examination Inquiry under the sponsorship of the Carnegie Foundation. M. Desclos, President. Paris: Ramlot and Co.,* 1933. *Pp.* xiii+183, *plus charts in color.*

An unusually effective presentation of education in France, prepared in a limited edition. Invaluable for college and university libraries for students of comparative education.

VOCATIONAL GUIDANCE IN ACTION. *American Association of Social Workers Job Analysis Series, Volume 5. By John A. Fitch. New York: Columbia Unisity Press,* 1935. *Pp.* xvii+294. $2.75.

Decidedly interesting and worth while presentation of certain guidance activities in their more dynamic aspects. Written from the viewpoint of the field.

LEARNING HOW TO LEARN. With Special Emphasis on Improving Reading Ability. *By Walter B. Pitkin, Harold C. Newton, and Olive P. Langham. New York: McGraw-Hill Book Company, Inc.,* 1935. *Pp.* vii+194. $0.92.

An interesting book that should prove helpful to high school and college students having difficulty in reading. It is doubtful whether any of the practice exercises will effectively remedy the fundamental defects in reading. Nevertheless they are interesting and worth while.

THE NEED FOR CONSTITUTIONAL REFORM. A PROGRAM FOR NATIONAL SECURITY. *By William Yandell Elliott. New York: Whittlesey House, McGraw-Hill Book Co., Inc.,* 1935. *Pp.* x+286. $2.50.

Certainly a strong moving argument for fundamental changes in our traditional form of government by an able scholar and clear thinker. No patches but an entirely new set of social tires are advocated. It is the type of book that one wants to read several times before either agreeing or condemning the thesis. The volume is recommended as collateral reading in junior college history and government classes.

THE SOCIAL IDEAS OF AMERICAN EDUCATORS. *Report of the Commission on the Social Studies, Part X. By Merle Curti. New York: Charles Scribner's Sons,* 1935. *Pp.* xxii+613. $3.

An interesting presentation of the views and the social philosophies engendered by those views of certain American educationists both past and present.

SOCIALIZING OUR DEMOCRACY. A NEW APPRAISAL OF SOCIALISM. *By Harry W. Laidler. New York: Harper & Brothers,* 1935. *Pp.* x+330. $3.

Without this clear-cut exposition and appraisal of current socialism it is difficult to understand current programs. Clearly written, strongly presented and developed in an exceedingly welcome style.

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TIMES DO CHANGE!

There was a time, doubtless, when the attire of the gentleman in the picture would have been admired as the very latest thing. There was a time, also, when it would have been considered good management to polish or scrub floors by hand methods. But not now! The question is no longer, Does mechanical floor maintenance pay?

THE QUESTION NOW IS

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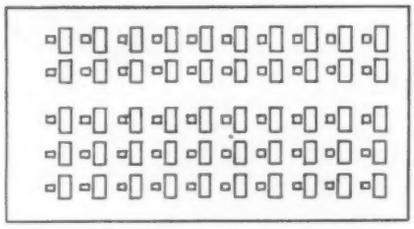

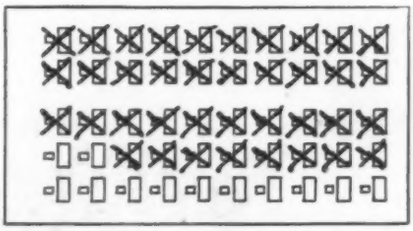

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